AN URBAN STUDY OF INDUSTRY IN SEDALIA, MISSOURI

By

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1950

Submitted to the Faculty of the Graduate School of the Oklahoma Agricultural and Mechanical College in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

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PREFACE

From birth the writer has lived in Sedalia, Missouri, and has become acquainted with the trade area and environs of Sedalia. He has become familiar with the peoples and their customs, habits and problems. Due primarily to the influence of the railroads, the peculiar growth of this industrial city has been noticed by the writer and it appears a desirable project to analyze and interpret this development in the light of geographic factors.

Being able to see the present situation, in relation to the past, the writer became interested in why Sedalia had become industrialized and what the future trends might be. By further study of the city, including its physical setting, functional divisions, history and industrial advantages, the writer is convinced that Sedalia will continue to grow and expand if proper steps are taken to educate and guide people to exploit these advantages.

The writer wishes to express his gratitude to Dr. David C. Winslow, Assistant Professor of Geography, Oklahoma Agricultural and Mechanical College, for his valuable suggestions and supervision in preparation of this thesis. The writer is also indebted to Dr. Edward E. Keso, Head of the Department of Geography, for suggesting the study and furnishing helpful advisement, and to Professor George S. Corfield for aid in the organization, cartographic preparation and selection of reference material.

For conferences concerning the community, it's industries, and resources, gratitude is expressed to Mr. Herbert Studer, Mayor of the City of Sedalia;

Mr. James Green, City Engineer; Mr. Chester A. Brown, Manager, Chamber of Commerce; Mr. Harry Morrison, Manager, Pettis County Farm Bureau; Mr. C. F. Scotten, President, Pettis County Historical Society; Mr. Julian H. Bagby, Manager, Beatrice Foods Company; Mr. C. W. Mathieson, Vice-President, Town and Country Shoe Company; Mr. Charles Van Dyne, Vice-President, Adco, Incorporated; Mr. Neal O. Reyburn, President, Home Building Corporation; Mr. F. F. Durham, Chief Clerk, Missouri-Kansas-Texas Railroad; Mr. Harry Lindstrom, Manager, Zephyr Manufacturing Company; and Mr. O. W. Wiley, Manager, Pittsburgh Corning Glass Company. Members of the staff of the Oklahoma Agricultural and Mechanical College Library were quite cooperative. Numerous other persons have given constructive advice and furnished valuable information, which it is a pleasure to acknowledge in a general way.

J. W. M.

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CHAPTER I

INTRODUCTION

It is the purpose of this geographic study to show how transportational and industrial growth came about in Sedalia, Missouri, and to show the development since that time. Knowledge of both the urbanization and industrialization is necessary for a better understanding of the community. Presenting the problem and considering the geographic attributes of the city should lead to the evaluation of the possibilities of its additional aggrandizement and continued overall growth.

The city is located in northwest central Missouri on the outer flank of the Ozark Border Plain. The relief is neither monotonous nor severe, and consists of a gently rolling prairie with a few ridges in association with small stream erosion. The climate is continental, with a complete cyclonic cycle of four distinct seasons.

In studying the reasons for the location and development of industry, several distinct advantages or prerequisites are noticed as the bases of manufacturing. Specifically these are (1) transportation facilities, (2) location, (3) water supply, (4) fuel supply, (5) favorable living conditions, (6) labor supply, (7) raw materials available, (8) recreational facilities and (9) stimulating climate. A combination of these factors are the essentials of the modern industrial development of a community. These are both natural factors and human factors. A third factor should be added, that of time, which only our posterity can realize after further development.

In the survey and analysis of each of the individual industries, the

following information will be utilized to show the fundamental significance of each industry: (1) why industry located here, (2) raw materials used, (3) types of products, (4) value added, (5) number of employees, (6) trade territory, and (7) what the industry means to the community. Through this survey and analysis an understanding of why Sedalia is an industrial city within an agricultural region should be obtained. Other questions, as well, should be answered.

The urbanization of the city may best be measured by the functions of the city. Through various functions, <u>i.e.</u>, (1) business, (2) manufacturing, (3) residential and (4) recreational facilities, a city has personal characteristics. In determining Sedalia's functions and functional services, a picture of the city's character will be at hand.

Further urban study will be done through house classifications according to (1) construction materials, (2) size and value, and (3) number of families accomodated. The city will be divided into quadrants. Representative blocks of each quadrant will then be averaged to give a classification of house types. New city growth will be considered from the standpoint of new streets and new houses added to the city in the previous ten years.

Through historical, locational and industrial essentials, the writer plans to present a picture of the geographic aspects involved in the growth of the community, both industrially and areal. Prognostication of the future is attempted, founded upon geographic principles.

CHAPTER II

PHYSICAL SETTING OF THE AREA

Climatology

Sedalia, Missouri is situated at 38° 43' North Latitude and 93° 12' West Longitude, a location that falls near the geographic center of the United States. Because of such location, it is evident that Sedalia will have a very well defined continentality in climate. Influences in the summer from the Warm Gulf air masses and in the winter from the Polar Continental air masses lead to marked extremes and variability in the weather.

The type of climate that the city experiences is classified as Humid Microthermal with a long summer phase and a short winter phase. This climate has a genuine winter with a snow mantle and a genuine summer with high temperatures which produce a characteristic mid-latitude interior climatic cycle.

The snow mantle is shown below:

Table I

Snow Mantle²

50 Year Record	Number of days trace or more	50 Year Record	Number of days trace or more
January	8	July	0
February	7	August	0
March	6	September	0
April	1	October	1
May	0	November	3
June	0	December	6

1 Glenn T. Trewartha, An Introduction to Weather and Climate, p. 442.

2 United States Agriculture Department Weather Bureau Climatological Data, Missouri Section, Washington, D. C., United States Department of Agriculture (1930). The severity of climatic type results from situational factors, particularly with respect to latitude and the position on the continent. The interior location accounts for the annual ranges of temperature at Sedalia. Here, it is noticeable that the temperature is always passing the 75° Fahrenheit mark but never howers there for long.

The climatic region in which the city is found, which is about 360,000 square miles in size, is bounded on the north by the requirements that not more than three months have a mean temperature of less than 32° Fahrenheit and not more than six months less than 50° Fahrenheit. The southern boundary is the 43° Fahrenheit isotherm.

There are usually fifteen to twenty days of 0° Fahrenheit weather and ninety to one hundred days where the temperature hovers around 32° Fahrenheit. The 0° Fahrenheit weather often occurs in connection with cold waves, <u>et. al</u>. an active cyclone with Tropical Maritime Warm air is closely followed by Polar Continental air.⁵

The average number of days with maximum temperature of 90° Fahrenheit or above during the past fifty years is 31, occurring in May, June, July and August.⁶ The average number of days with a minimum temperature of 0° Fahrenheit or below is five, occurring in January, February, December. Reference should be made to the climatic graph on page 6 showing the distinct rise in summer temperatures and decline in winter which is characteristic of interior continental conditions.

3 Thomas A. Blair, Climatology, General and Regional, p. 219.

4 Ibid., p. 220.

5 Ibid., p. 222.

6 Victor Mason, Weather Observer, Sedalia, Missouri, Conference, May 29, 1951.

Spring is a short and uncertain season. The winter season usually continues well into March and then frequently changes quickly to warm weather. Summer temperatures cease after the middle of September and then the temperature begins to decline rapidly and steadily, showing the pronounced continental effect.

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1.51	22	10	- de de

		Temperature R			
		50 year re	cord	Average n days	with
	Average Daily Maximum	Average Daily Minimum	Average	Maximum Temp. 90° or Above	Minimum Temp. Zero or Below
January	38.2	21.6	29.9	0	2
February	41.9	23.5	32.2	0	2
March	53.0	33.9	43.4	0	0
April	64.4	45.7	55.1	0	0
May	73.8	55.5	64.7	1	0
June	83.5	65.1	74.3	6	0
July	88.4	69.8	79.1	13	0
August	87.1	68.2	77.6	11	0
September	79.5	60.5	69.9	5	0
October	68.0	48.8	58.3	0	0
November	53.3	36.0	44.5	0	0
December	41.2	25.7	33.5	0	1

Although winters are not without precipitation, summers have the maximum amount. May receives the most rain of any month in spring, following the typical Missouri rainfall regime with a maximum in May and in September.

Table III

	Precipi	tation	
50 year Record	Average Total in Inches	50 year Record	Average Total in Inches
January	1.32	July	3.79
February	1.59	August	3.92
March	2.47	September	5.54
April	3.06	October	2.63
May	4.98	November	2.08
June	4.47	December	1.32

7 United States Agriculture Department, Weather Reports, op. cit.

8 Ibid.

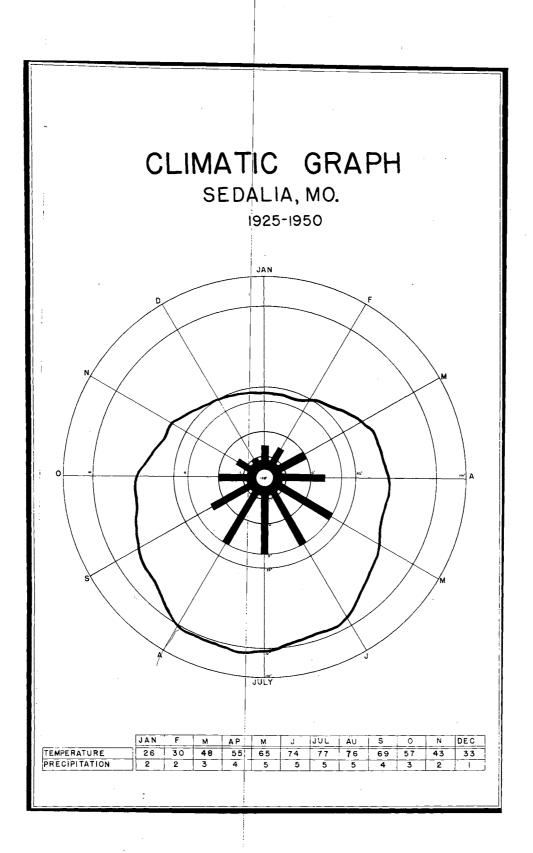


Figure a

This seasonal distribution is related to the following conditions: (1) during winter subsiding air is conducive to dry periods because it is warming up and its ability to hold moisture is increased, (2) specific humidity is much less over continents during winter, (3) convection is at a maximum during the summer months, and (4) consequent upon seasonal extremes of temperature and hence pressure a monsoon system tends to develop in April and last until late September. Reference is made to a Prevailing Wind Direction chart below which shows southerly winds in the seven month period from April to October, and a maximum of rainfall during these months. The precipitation average of Sedalia for the last fifty-eight years is 36.05 inches.⁹

Table IV

10

Prevailing Wind Direction of Sedalia, Missouri

50 Year Record

January	Nw.
February	Nw.
March	Nw.
April	s.
May	S.
June	s.
July	s.
August	s.
September	s.
October	s.
November	Nw.
December	Nw.

The relative humidity is rather constant throughout the year with an average of 55 per cent at 12 P. M.

9 Victor Mason, op. cit.

10 United States Agriculture Department, Weather Reports, op. cit.

11 Ibid.

Meracive 1	dumidity of Seds	LLLE, MLSSC	<u>uri</u>
50 Year Record	6:30 A.M.	Noon	6:30 P.M.
January	78	64	69
February	78	59	66
March	75	53	59
April	73	53	55
May	75	54	57
June	75	53	57
July	75	48	53
August	77	50	55
September	79	53	60
October	76	51	56
November	74	54	61
December	78	64	69

TABLE V

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This humidity is at a maximum in September with 64 per cent and at a minimum in November with 48 per cent. This is rather high the year round though and makes for muggy summers and raw winters.

Convection is at a maximum in summer; this condition is clearly shown through the cloudy and party cloudy days occurring in the spring and summer.

Amount of Overcast	by Months a		13 issouri
50 Year Record	Clear	Partly Cloudy	Cloudy
January	12	8	11
February	10	8	10
March	11	10	10
April	10	10	10
May	10	13	8
June	12	12	6
July	16	11	4
August	15	11	5
September	15	8	7
October	16	7	8
November	13	8	9
December	11	8	12
Total	151	114	100

Table VI

12 United States Agriculture Department, Weather Reports, op. cit.

13 Ibid.

Over two-thirds of the days are cloudy in March, April, May, and half the days are cloudy in June, July, August, and September.

In this type of climate one needs two kinds of diet, two kinds of work 14 habits, and two kinds of clothing. Because of the heat and humidity in the summer, a very light weight clothing must be worn to assure maximum air circulation and evaporation to take place. Two kinds of work habits refer to not overheating through over-exertion in the summer, and two kinds of diet refer to the amount of heat calories consumed. Naturally, the inhabitants desire less body heat in the summer, so they consume less calories by the consumption of low calorie foods. The writer is emphasizing these human adaptations to show the well defined continental characteristics of the climate.

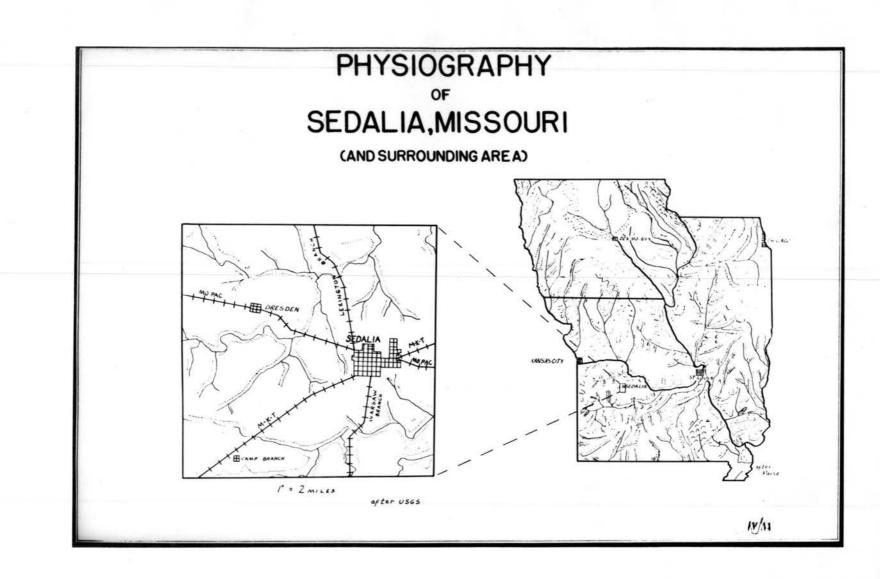
This alone is not restrictive to man's adaptation, for it is well known that where you have a complete cyclonic cycle with well defined seasons, man puts forth his best energy and vigorous activities. The climatic region is the main corn and winter wheat belt region of the United States, Sedalia occupying a central location in relation to it. The principal crops grown here are corn, oats, wheat, soybeans and rye. The area certainly has this marked annual cyclic variability which influences man and land use in positive and negatative ways.

Physiography

General Topography and Geology

Sedalia, Missouri is located generally on the northern fringe of the Interior Highlands where they join the Central Plains. The altitude of this

¹⁴ James Marsten Fitch, "Too Much Climate," House Beautiful, Vol. 92, No. 5 (May, 1950), p. 167.





region is approximately five hundred to one thousand feet.¹⁵ The city, while centrally located in Pettis County, lies chiefly on the northwest flank of the Ozark Dome, in that physiographic province known as the Ozark Border Plain. The Plain encircles the Ozark Dome proper on the west and north and is upheld by a series of resistant limestones of Mississippian age.¹⁶ The characteristic topography is that of a rolling smooth plain as is shown on the physiographic diagram. The Plain is dissected in places by deeply carved, narrow valleys. Rough and rugged country occasionally prevail, however, in the proximity of the major streams and this is where the only noticeable topographic features do occur. The topography of the county 17

The surface of the County moderately slopes to the north. Along its southern boundary elevations exceed 1000 feet, while elevations at the northern boundary are approximately 700 feet. Sedalia has an elevation of 910 feet above sea level. The maximum relief between the highest point and the lowest point in the County is 500 feet. Therefore the County may be divided into three physiographic regions, <u>i. e.</u>, rolling hills, gently rolling prairies, and hilly zones adjacent to streams.

Sedalia, itself, lies in the gently rolling prairie region which is clearly revealed by reference to the physiographic diagram. The only relief features on this very flat prairie are those carved by small streams.

The drainage of the county is effected through streams tributary to the Lamine River, which barely crosses the boundary at the northwest

15 Wallace W. Atwood, The Physiographic Provinces of North America, p. 12.

16 Mark A. MacGruder, The History of Pettis County, p. 74.

17 Ibid., p. 74.

corner.¹⁸ Its largest tributaries are Flat Creek and Muddy Creek which drain the surrounding area.

The geologic formations exposed in Sedalia are in age from Lower Ordovician to Recent. The bed rock is chiefly composed of limestone, varying in composition from dolomitic to crystalline limestone. The rock strata dips to the northwest at an angle which exceed the north surface slopes; thus the oldest formations are exposed in the southeast and the youngest in the northwest.

The unconsolidated deposits which form the mantle, seldom attain important thickness. Most shallow wells indicate the mantle to be only ten to twenty feet thick.¹⁹ The mantle has been formed as a residuum from the disintegration of the underlying bed rock. Thus a red, or yellow clay, filled with chert has weathered out of the limestone. Locally the residuum is sandy.

Chouteau limestone occurs on thick massive beds with very few bedding and stratification planes. The rock is fine grained, compact and siliceous, with a very uniform light drab blue color, although upon weathering it becomes buff.²⁰ Large chert nodules are disseminated irregularly through it and the stone breaks with a conchoidal fracture. This stone has been quarried extensively around Sedalia, and will be treated in a later chapter. Burlington limestone overlies Chouteau in the area in certain places and is also quarried. The principal difference between the two is found in texture and color.

18 MacGruder, op. cit., p. 75.

19 Ibid., p. 76.

20 Ibid., p. 77.

Phelps sandstone is found in scattered patches. It occurs in wells reaching the base of the Mississippian limestone. The thickness of the sandstone is from one foot to fifty feet. The sandstone is white and is composed of rounded grain quartz. It is utilized for manufacture of glass and core sand.

The soils of Sedalia belong to a group of residual prairie soils that cover the greater part of western Missouri. In general the soils are silt 21 loams containing relatively little sand or clay. They are usually mellow or are easily made so with proper treatment. These soils are well drained. The subsoils are usually heavier than the surface materials which make the various types generally retentive of moisture.

Specifically the particular soils of the Sedalia region are of four major types, these being Summit silt loam, Oswego silt loam, Crawford silt 22 loam and Eldon silt loam.

The Summit silt loam is known as "black land" or "black prairie." It consists of black or dark brown, rather heavy, silt loam, ten to twelve inches thick, which is underlain by a brownish crumbly silty clay loam. At about eighteen inches this grades into black silty clay of a plastic waxy character.²³ The Summit silt loam represents a typical prairie land type and originally supported a heavy growth of wild grasses. When properly cultivated, the soil is loose and easily tilled. It is well suited to all of the staple crops.

The Oswego silt loam is typical prairie soil and is characterized by its dark color, nearly level topography and stiff sub-surface strata. The

²¹ Harry A. Morrison, Agent, Pettis County Farm Bureau, Sedalia, Missouri, Conference, March 23, 1951.

^{22 &}lt;u>Ibid</u>.

²³ MacGruder, op. cit., p. 86.

surface soil to a depth of twelve inches consists of dark brown or black silt loam. The subscil, at a depth of sixteen to eighteen inches is a brown or grayish brown, heavy plastic clay.

The soils of the Grawford silt loan is a dark brown mellow silt loan grading at about eighteen inches into friable silty clay loam.²⁴ Frequently there is little change, but the subsoil is usually redder. The warm open character of the soil causes rapid decay of organic materials. The type requires careful farming with frequent growing of legumes as green manuring crops. The Eldon silt loans show little appreciable difference from these other soils.

The soils of the Sedalia area are of high quality with good humus content. All of the staple crops are produced with good yields, the principal ones being wheat, corn, rye, barley, scybeans, legunes, and grasses.

In conclusion, it can be said that Sedalia lies on a gently rolling prairie. The humid climate is continental in character with long summers and short winters, having a maximum of precipitation occurring in summer. The soils of the area are primarily rich silt loans which are high in humus. The local mineral resources are various types of limestone and sandstone. The area is drained by three small streams, all of which are branches of the Lamine River which is a tributary of the Missouri River. The natural features are conducive to prosperous land utilization.

24 MccGruder, or. cit., p. 89.

CHAPTER III

HISTORY OF THE COMMUNITY

Sedelia, Missouri has grown from a village of ten or fifteen families to a city of 20,208 people in a period of ninety years. It has developed from a few frame houses into a community valued at \$16,000,000.¹ Two or three individual farms in the surrounding county have increased to a total of 2,534 farms averaging one hundred and sixty acres each.

It is most fitting to say that the early history of Sedalia is the history of the railroads.² Following the railroads came the highways until today Sedalia is bisected by two United States highways running north and south and east and west and divided by the main lines of two major railroads; one running north and south and another running east and west.

It is owing to the foresight and energy of General George R. Smith that the Missouri Pacific Railroad left the valley of the Missouri River and came across central Missouri. This was the first railroad line west of the Mississippi.³ In 1856 Smith bought 1,145 acres of land south of Georgetown, Missouri. Sedalia, Missouri was to stand on this farm and to spraul out over 6.2 square miles. General Smith paid \$13.00 an acre for this land, which at that time was a tremendous price while today, with improvements.

¹ Herbert Studer, Mayor, Sedalia, Missouri, Conference, March 23, 1951.

² Robert M. Crisler, Professor of Geography, Washington University, St. Louis, Missouri, Correspondence, April 10, 1951.

³ Mark A. MacGruder, The History of Pettis County, p. 203.

^{4 &}lt;u>Ibid.</u> p. 204.



Figure 1. AIR VIEW OF THE CITY

it is worth approximately \$4,000.00 an acre.

On November 30, 1857 General Smith filed for the record the plot for Sedville. The town was named in honor of Sarah E. Smith, whose pet name was "Sed."⁵ The plot contained 160 acres lying north of the Missouri Pacific Railroad "right-of-way" while the remainder of land was south of it. The filing of the plot was about the only thing that happened to Sedville at this time. Georgetown, north of Sedville, was the county seat then and had a population of 1,500, being the chief town.

On October 16, 1860 General Smith and Colonel David Bouldin filed the plot of a town which they called Sedalia. This town plot included all of the original land and in addition a large section of land extending from the present line of the Missouri Pacific Railroad as far south as Third Street today. The name Sedalia was chosen because the original "Sed" could be united with the more suphonius terminology "alia." Lots were sold in the original plot in 1858, the first being recorded in September of that year. It was soon after the sale of lots began that the first buildings were erected and the town became such in reality. The plot was legally surveyed and divided by Mentor Thomson, assisted by Richard Holland.⁶

The first passenger train entered Sedalia on the 17th of January, 1861.⁷ After this event, with railroad facilities opened up and the road in actual operation, the large stores and establishments at Otterville (11 miles east) and Syracuse (20 miles east) moved to Sedalia. Not only were the goods moved, but even the buildings and portions of buildings. Also, houses and

- 5 MacGruder, op. cit., p. 204.
- 6 Ibid., p. 205.
- 7 Mistory of Pettis County, (_N.P. 18827), p. 275.

`. 17 portions of houses were noved from Georgetown, Missouri, then the county seat.

In 1861, Sedalia was confined to two blocks, between Ohio and Kentucky Avenues and all of the store buildings and business houses were on Main 8 Street. At the close of 1861 Sedalia boasted about three hundred residents, all of which resided north of the Missouri Pacific Railroad tracks. There were about twenty-five business houses located here, but there were no churches or schools within the city limits.⁹ During the latter part of the year a hugh cattle corral was built within the community, and the town became a competitor of Abilene, Kansas as a livestock shipping point to the north and east.

There was no such thing as civil government, no actual corporate body, in Sedalia from the breaking out of the Civil War early in 1861, until the granting of the charter in 1864. From 1861 to 1864 the State of Missouri was under martial law. Pettis County was part of a militia district, and during the conflict Sedalia was a military post and the head official was the Commanding Officer.¹⁰ At this time conditions reached such a critical stage that all improvements and building construction were stifled in Sedalia for a while.

As soon as the town was established it immediately became evident that it must become the county seat instead of Georgetown, five miles to the north. The question of the removal of the county seat was agitated and discussed, but the war between the states came along and all such questions

- 8 MacGruder, op. cit., p. 205.
- 9 Ibid., p. 207.
- 10 <u>Ibid.</u>, p. 208.

were swallowed up in the turnoil that followed. No definite action was taken until 1864 when by an act of the legislature, passed in February, the county seat was moved to Sedalia.

The act specified:

"Section 1 - The seat of Justice of the county of Pettis is hereby removed from Georgetown, the present seat, to the town of Sedalia on the Pacific railroad. Section 2 - The commissioners hereafter appointed shall immediately after taking effect of this act, proceed to select a site for the location of county buildings. Section 3 - The public records and moveable property shall be removed to the new county seat. The courts shall be moved after the passage of the act."11

In December, 1864 a group of men met and discussed the matter of drafting a city charter. When the work was completed it was presented to the legislature. Upon this draft was propered the present charter of Sedalia.¹² The bill granting it was passed February 15, 1864.

By the provisions of the charter the men who devised it were appointed the first officers and aldermen. The type of government organized then is still in force in Sedalia. The city is divided into four wards with two aldermen elected from each, and a mayor serving as the executive head.

In the spring of 1865 the commissioner erected a frame court house, which was near Ohio street between Second and Main Streets. Here the first term of the circuit court was held in that spring.

The growth of Sedalia from about this time on was very rapid. The following service institutions are basic functions of every city. The fire department was organized and established in 1863 with a central location in reference to the city and outlying areas. In 1882 the water works was completed and the

^{11 &}lt;u>History of Pettis County</u> (/N. P. 18827), p. 277.

¹² MacGruder, op. cit., p. 209.

mains which serve the city were laid. Schools and public buildings were erected to supply county and municipal needs.

In 1869 the Missouri, Kansas and Texas railroad was constructed through Sedalia, which gave the city north and south transportation as well as east and west transportation. This line connects Sedalia with St. Louis to the east and Kansas, Oklahoma and Texas to the south and southwest. The Missouri Pacific Railroad connects Sedalia with St. Louis to the east and Kansas City, and Denver, Colorado to the west. In 1872 the railroad built it's shop and roundhouse.

Because of its geographical location and good transportation facilities, the city of Sedalia has grown until it stands today an industrial, agricultural and municipal center, primarily serving the county of Pettis and its inhabitants. It is overshadowed by Kansas City and St. Louis as far as great retail, industrial, and economic centers are concerned. As previously mentioned the growth or history of Sedalia is the story of the railroads, and their concentration here, for if it were not for them the growth of the community would have been stifled by competition of the big cities many years ago.

The Sedalia of today, considered by the functions it performs and the services it offers, will be discussed in later chapters.

CHAPTER IV

FUNCTIONAL DIVISIONS OF THE CITY

In discussing the functional divisions of Sedalia, Missouri the writer has classified the functions into five categories according to the purpose they fulfill or the services they offer. These five classifications of functions are: (1) business, (2) manufacturing, (3) residential, (4) recreational, and (5) service. Through the study of these functional divisions, a key to the inner workings of the city is at hand. The writer will treat each functional classification separately and point out its particular aspects. They are a basic consideration in determining the significance of a city in respect to both local and regional activities. In short, the question to be answered is, "What does this city offer and accomplish?"

The Business Function

The business district of Sedalia is centrally situated in the city facilitating utilization by all of the members and institutions of the community. The business district is usually considered the heart of the city, but in Sedalia this district would be better described as the stomach because of location and function, with location the basic consideration.

The district has as its primary shape a <u>T</u> with Ohio Street the vertical bar and Main Street as the horizontal bar. These streets are the main arteries of the business section. They also serve as the street pattern division points of the city showing their central location. Ohio street is the east-west division of Sedalia, while Main street is the north-south division of the city.

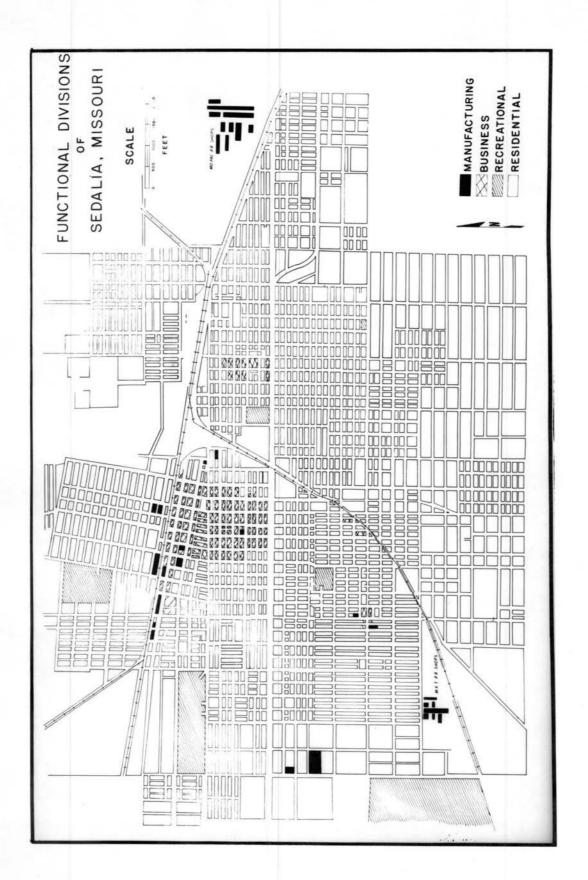


Figure c

The true T shape was the original form of this district, but through growth of the city and hence of the business area, a different shape has evolved. The shape this section occupies today is one similar to an electric railroad with a third middle track, with Ohio serving as the center track and Main, Second, Third, Fourth, Fifth, Sixth, and Seventh Streets as the cross ties which meet at right angles. Generally these ties extend two or three blocks east and west of Ohio, giving a very compact feature to the district, still resembling the three track pattern. When viewing this section from above, it takes on a "box-like" or rectangular shape.

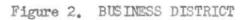
The services or functions of the business area are, of course, largely commercial. This is the shopping center of the community and of all Pettis County. This section brings to the people of Sedalia and surrounding territory the finished goods which they need in every day life. There is no definite pattern within, and all of the following services are intermixed throughout the district: retail and wholesale concerns, financial houses, transportation facilities, professional services, and sleeping and eating accomodations.

Although the business district is centrally located, it is still not accessible to all of the people every day because of the cost and time required to utilize transportation facilities to and from the district. As a result, small business centers have tended to develop in outlying sections of the city. These outlying business nuclei consist mostly of groupings of grocery stores, drug stores, "dime stores", barber shops, cleaning establishments and "filling" stations. An occasional professional office and recreational parlor are also found in some of these small areas. The main suburban shopping centers are noticeable at the following locations:

(1) Fifth and Engineer Streets

(2) Sixteenth Street and Ohio Avenue





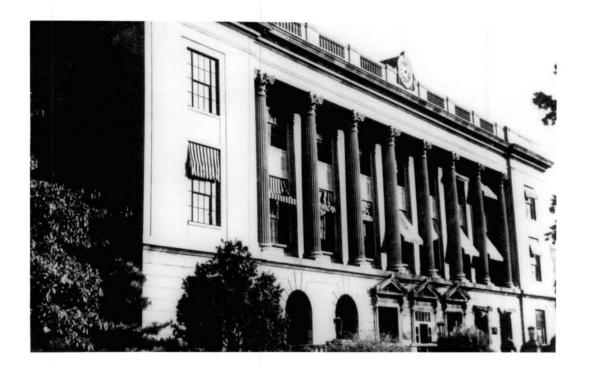


Figure 2a. FETTIS COUNTY COURT HOUSE

- (3) Sixteenth Street and Grand Avenue
- (4) United States Highway 50 and State Fair Boulevard
- (5) Main Street and Grand Avenue

These urblets provide neighborhood trading service centers needed every day.

The Manufacturing Function

The manufacturing divisions are located where they are because of the excellent transportation facilities sites. In most cities the manufacturing section is usually on the outskirts, which is also true in Sodalia except where railroad facilities have necessitated the location of some industries centrally. This is especially noticeable along the north side of Main Street where the manufacturing is just in the shadow of the business section.

Generally the heavy industries are located in the north sector of the city which is favorable because of the prevailing southerly winds. By this arrangement, most of the snoke and odors are blown away from the city. This northern location also allows for favorable ventilation. The buildings have their rear entrances and loading platforms facing toward the railroads on the north side, while their frontage faces south and receives a maximum amount of sunlight and heat in winter.

In general, manufacturing plants are located along transportation lines. Such sites may be selected on the Missouri Pacific Railroad, the Missouri-Kansas-Texas Railroad or United States Highways 50 and 65. If not located directly on the railroads, the industries are usually located on a "spur" track.

The various industries will be discussed in separate chapters and there the functions and locations will be fully defined.

The Recreational Functions

The recreational functions of the city give a picture of the ways in which the industrial community has provided for the leisure time activities of its inhabitants. Without proper recreational facilities it would lack a most important element for proper functioning.

Sedalia today contains six parks, three swimming pools, and numerous facilities for all types of athletic and social events. It is the site for the annual State Fair which is classified as both recreational and commercial, as it brings nearly 300,000 visitors, or potential customers, to the city within one week. Sedalia has also been long known as the gateway to the Ozark recreational area, and these facilities are within the reach of almost all of Sedalia's citizenry.

Liberty Park is the largest and the chief park of Sedalia. It contains about forty acres of land and is located in the northwest quadrant of the city. The park has a permanent convention hall used for various social events and state conventions. The hall can be utilized by the public for a small rental fee. It has a capacity of about 3,000 people. To the north and west of the hall are located the baseball field and football field and their stadiums. The local semi-professional ball teams utilize the field while the Smith-Cotton and Hubbard high schools use the football field.

Water sports are enjoyed to the west of the ball fields in a modern new swimming pool which is 90 by 170 feet in size. East of the fields is a picturesque lagoon which is stocked with fish in summer and used for ice skating in the winter. Throughout Liberty Park there are playground areas for the

1 Herbert Studer, Mayor of Sedalia, Missouri, Conference, May 29, 1951.

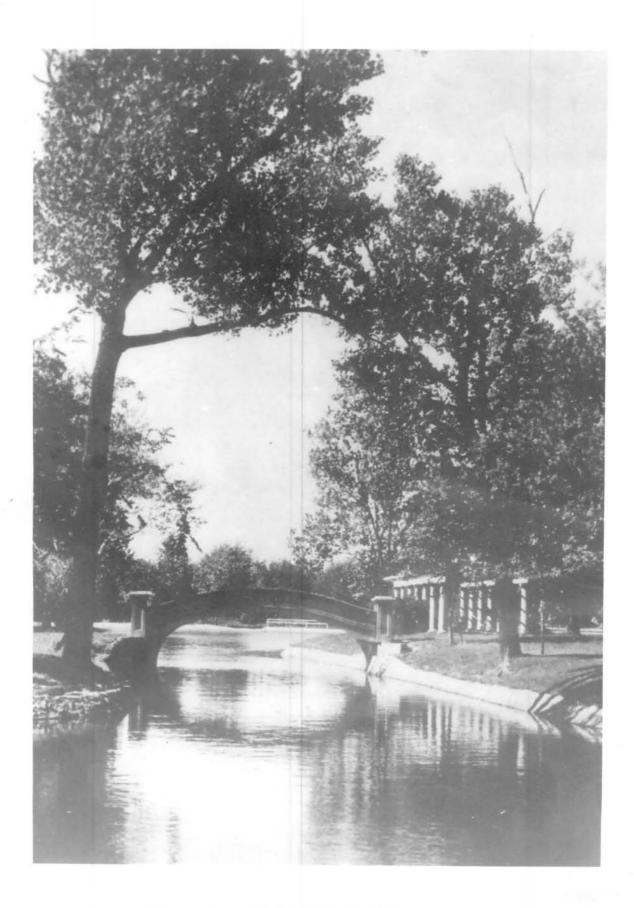


Figure 3. LIBERTY PARK LAGOON



Figure 4. LIBERTY PARK SWIMMING POOL

children and picnic areas for all the people.

In the north central section of the northwest quadrant of the city is located Hubbard Park for Negroes. It has a total area of twenty-five acres. The park contains a baseball field and stadium, and a new swimming pool, forty by seventy feet in size. Playground and picnic areas are found scattered throughout the park.

Housel Park is located in the northeast quadrant of the city and contains twenty acres of land. It provides the people of this section with a baseball field, picnic grounds, and a playground area.

There are two smaller parks. Southeast or Center Street park has just been developed. It embraces approximately two acres of land and is used primarily for neighborhood softball games. Phieffer Park, although centrally located, has been developed very little. It contains about six acres of mixed coniferous and deciduous trees. The area is so heavily wooded that no attempt has been made to clear it out.

The total area occupied by Sedalia's parks is about seventy-five acres. Supervision is by the Park Board, appointed by the Mayor and City Council.² This board employees workmen and supervisors. The Board administers all maintenance and construction within the parks.

In addition to these recreational offerings, Sedalia has two nine-hale golf courses. Elm Hills is a public course located two and one-half miles south of the city on United States Highway 65. It has sand greens. The Sedalia Country Club course is a grass green course located one-half mile south of Sedalia on United States Highway 65. Total membership at both of these clubs is approximately 300.

2 Mark A. MacGruder, History of Pettis County, Missouri. p. 235.

The town has numerous motion picture theaters, lodges and clubs, all with large memberships.

The Missouri State Fair Grounds is located just southwest of the city. This is a source of recreation, business, and a commercial "boom" to Sedalia for one week of the year. The fairgrounds includes 275 acres of land with sixty permanent buildings located on these grounds. Within the fairgrounds are 22,500 square yards of macadam surfaces roads, 8,000 square yards of cinder and graveled roads and 21,000 square yards of oil surfaced roads. The State Highway Department maintains these roads as part of the state system.

There are seventy-four miles of six inch water lines and twenty-eight miles of twenty inch sewer lines within the fairgrounds. There are 81,000 square yards of concrete sidewalks traversing the complete ground. All of the area is fenced in, giving it a compact, organized character.

The fair, although held but once a year, is an all year round working organization. Because of the need for clerical and maintenance work it supplies several people of Sedalia with a livelihood. The fair grounds is owned by the State of Missouri and is operated by the State. It was founded as a State Department in 1901; now it is operated under a division of the State Department of Agriculture.

The Lake of the Ozarks is a great mid-continent playground of America. The nearest location of the Ozarks to Sedalia is thirty-one miles, but to reach the heart of the area it is approximately sixty-five miles. This area offers every opportunity for the hunter, fisherman, naturalist and sightseer.

The great Bagnell Dam, completed in 1931 by the Union Electric Company, created one of the largest artificial lakes in the world. The lake is 129 miles in main channel length, and one-half to three miles wide. The shore line is about 1,372 miles in length giving many places for resort camps and lakeside recreations. Sedalia is so situated that vacationists may take advantage of the bathing, fishing, boating, hunting and other facilities at the Lake while sojourning in the city.

In conclusion, Sedalia's recreational facilities, in the community and thereabouts, are quite adequate for the population, even accomodating numerous visitors. A long range plan is in effect to increase these facilities and make recreation an even more important function of the city than it is today.

The Residential Function

In discussing the residential sector or functional division of Sedalia, the writer is primarily concerned with house classification and where the city is expanding. To use this approach the city is divided into quadrants, using the intersection of Broadway Boulevard and Ohio Avenue as the hub. By quadrants is meant each quarter section of the city, <u>i. g.</u>, the southwest quarter, southeast quarter, northwest quarter, and northeast quarter. These are: (1) The northeast quadrant is enclosed by Ohio Avenue on the west, Tower and Johnson streets on the north, Harding Street on the east and Broadway Boulevard on the south.

(2) The northwest quadrant embraces Ohio Avenue on the east, Henry Street on the north, State Fair Boulevard on the west and Broadway Boulevard on the south.

(3) The southeast quadrant is delineated by Broadway Boulevard on the north, Harding Street on the east, Ohio Avenue on the west and Twenty-fourth Street on the south.

(4) The southwest quadrant is separated by Broadway Boulevard on the north, Ohio Avenue on the east, State Fair Boulevard on the west and Twenty-fourth Street on the south. In general, the eastern half or the northeast and southeast quadrants are composed of residents who have been influenced greatly by the Missouri Pacific Railroad shops. Most of the workers of the shops live within these sections. The northeast sector of the northwest quadrant is occupied by the Negroes of Sedalia. They number approximately 4,000. The remainder of this quadrant is occupied by families of the moderate to low income brackets. The southwest quadrant is composed of homes of people of medium, upper medium and high income brackets. Almost all of the mansions are found within this quadrant as well as many of the other higher classifications.

In classification of residential types a composite system was devised to best meet local conditions.

Table VII

Size and value

A	-	mansion
B	-	above average
C	-	average
D	-	below average
P		poor (three room or less)

Material composition

b - brick or stone or cement

w - wood

c - a combination

Accomodation

- 1 single
- 2 duplex
- 3 apartment



Figure 5. HOUSE TYPE Bwl



Figure 5a. HOUSE TYPE Abl



Figure 6. HOUSE TYPE Cwl.

The writer has used a system of investigation similar to random sampling except there will be three representative city blocks. In the northeast quadrant, using the first block example as the 500 block on East Fourth Street, the north side.

Example - Cw3, Cw3, Cw2, Cw1, Cw1.

This example shows the houses to be average homes, constructed of wood, and serving one to three families; the C indicating size and value (average), the w showing a material composition (wood), and the 1 meaning accomodation (one family).

The second example will be the south side of the 100 block on East Seventh Street.

Example - Cw3, Cw3, Bw2.

The classification shows approximately the same, with the houses being of average price, constructed of wood and accomodating from two to three families. There is one exception, the last being of above average in size and value.

For the third block, one on East Chestnut between Center Avenue and New York Avenue will be used.

Example - Cwl, Cwl, Cwl, Dwl.

The first three are classified C size and value (average) of wood construction and accomodate one family. The fourth is below average of wood construction and accomodating one family.

The streets of this northeast quadrant are mostly of macadam, gravel and brick. The only concrete streets are found in the far southwest corner of the quadrant.

To summarize, the residents of the northeast quadrant are of the moderate income bracket, living in average homes of wood, with the homes being intermixed single residences, duplexes and apartment houses.

In the southeast quadrant the homes are much the same except for the northwest sector. A representative block of this quadrant would be the north side of Eleventh Street between Montgomery and Brown Streets. The houses would classify - Cu2, Bw1, Cw1, Cw3.

In the northwest sector the houses are of higher value and size, <u>Q</u>. <u>g</u>., East Broadway, 100 block - Bwl, Bwl, Bwl, Bwl. The streets of this quadrant are mostly concrete, with a few macadam and gravel streets as joining links. Again this is an area of moderate incomes and average houses for the most part.

In the northwest quadrant is found the Negro section of Sedalia. These colored people number approximately 4,000 and are engaged as laborers for the most part. Some have become skilled technicians, doctors, or school teachers, but these are in the minority.

Much of the Negro section is of the lower class homes, but these are not indicative of the whole area. There are many C type homes and some B types but these nostly belong to railroad man, school teachers, and doctors. In general, we can classify the majority of these homes as Dwl. Intermixed among these homes are a number of residences that would have to be classified as Pwl and Pw2. The size and value of these houses are poor with construction of wood and accomodating one and two families. The remainder of this northwest quadrant is occupied by peoples of the middle pay class or lower upper pay class. A representative block of the northern part would be the 100 block on south Quincy Avenue.

Example - Cw2, Cw2, Bw1, Bw1, Bw1.

A representative block of the southern part of this quadrant would be the 1400 block on West Third Street.

Example - Bu3, Bul, Bul, Bul, Bul.

In conclusion, this northwest quadrant is a composite or transitional area of the general classification. The Negro or North central sector would be classified Dwl. The northwest sector would be classified Cwl and the southern east and west sectors would be classified Cwl to Bwl.

The southwest quadrant is, in the writer's opinion, the most valuable quadrant in reference to homes, property sites and neighborhood rolationship. The southern side of Broadway Boulevard is representative of mansion types of homes. For example, the 600, 700, and 800 blocks of Broadway are classified as - Abl, Avl, Abl, Avl, Abl, Avl.

The 1400 block on South Barrett Avenue would be overall representation of the quadrant. Example - Cwl, Bwl, Bbl, Bbl, Awl. The far southern part of this quadrant would be slightly less valuable and a block would read thus -1600 block on South Quincy - Cwl, Cwl, Cwl, Bwl.

The general picture, therefore, when these blocks are averaged is that this is the quadrant of greatest residential values. Sodalia, as a whole, fits the pattern of most other medium-sized towns in that it has a small percentage of low class homes, a large percentage of middle class homes, a small percentage of upper middle class homes and a few mansions.

The Service Function

The fifth classification is "services," in that it deals with such functions as police and fire protection, water supply, gas supply, hospitals, schools and other service institutions.

The police department occupies a central location in reference to the residential and business district. It is located one block west of Ohio Avenus on Second Street. The force is divided into three eight hour shifts,

giving the city twenty-four hour protection. The police operate their own two-way radio station and as a result can direct novements anywhere within the city.

The fire department is divided into two separate stations, one serving West Sedalia and the other serving East Sedalia. The West Sedalia department is located at 210 South Kentucky and has three pumper trucks and one combination aerial ladder and pumper truck. The East Sedalia department is composed of two pumper trucks, located at 900 East Fourth Street. The separate departments cooperate in answering alarms within the different sections of the city.

Gas, which is the primary fuel in industry and homes, is supplied by the Missouri Public Service. Sedalia receives gas from the transmission lines of the Cities Service Gas Company.³ The city connects to the main line at the compressor station at Ottawa, Kansas. The Ottawa-Sedalia line is a twelvo inch welded pipe with a designed pressure of 600 PSI.⁴

Sedalia's water supply is obtained from Spring Fork River and Flat Creek. There is a gravity flow line from Spring Fork reservoir to the pumping station and a stream flow from Flat Creek. The water supply is purified at a station three miles south of the city and then pumped to the city through mains. The plant contains two filtration and settling basins, with two artificial lakes containing 750,000,000 gallons which would suffice for approximately one year without rainfall. There are sixty miles of mains within the city.

The educational institutions of Sedalia are adequate for the population. There are six public grade schools and one public high school, one Roman Catholic grade school and one Roman Catholic high school. There is also one

4 Ibid.

³ M. D. Giokaris, Superintendent of the Gas Department, Missouri Public Service Corporation, Correspondence, February 20, 1951.

public Negro grade school and one public Negro high school. These schools have a total enrollment of approximately 4,000 students.

The public school system is organized with a superintendent, seven supervising principals and 120 teachers. The schools are supervised a school board elected by the citizens of the community. The board is composed of eight members. The schools afford adequate facilities for the latest presentation of all subjects.

The Central Business College occupies the old Sedalia high school building. All curriculum is commercial, graduating students with a business major.

It has four hospitals; one Negro, one medical, and two osteopathic, with a total of 176 beds. Sedalia today has thirty-five practicing physicians.

The last service division to be discussed is that of cemeteries. The city has two main cemeteries, totaling one hundred acres in area. Crown Hill cemetery is sixty acres and located in a region of black loam top soil, with yellow clay subsoil. Approximately 15,000 people are buried here to date. Memorial Park cemetery is forty acres in area and the top soil and subsoil are yellow to red clay. Approximately 4,000 people are buried here.

The functions of the city have been classified and analyzed. From this study may be ascertained the city character and without any one of them, the city loses its inherent nature.

CHAPTER V

THE HEAVY INDUSTRIES OF SEDALIA

In discussing the industrial geography of Sedalia, the writer is primarily concerned with the following: (1) why the industry is located here, (2) where the raw materials come from, (3) products manufactured, (4) trade territory, (5) value added, and (6) number of employees.

Discussion of the heavy industries in Sedalia is approached as it involves location of industry, and some of the activities of the city in the development of industrial possibilities.

The basic factors that govern the location of industrial plants are as 1 follows: (1) location of production materials, (2) labor supply (type), (3) sites, (4) industrial fuels, (5) transportation facilities, (6) market, (7) distribution facilities, (8) power, (9) water supply, (10) living conditions, (11) laws and regulations, (12) tax structure, and (13) climate.

Professor Alfred Weber, who has contributed much to the understanding of industry, supports a theory that industry in general is located somewhere between the sources of raw material and the market source. This theory considers the raw materials and markets as the basic factors, and the remainder of the factors act as an equalizing force in determining the location. Hence, Sedalia appears to be contrally located in reference to raw materials and market, with the other factors secondary but available.

The city has its own Industrial Development Division. They have listed

¹ Basic Industrial Location Factors, Industrial Series No. 74, United States Department of Commerce, (June, 1947), p. 2.

their activities and their purposes as follows:

- (1) Study the possibilities of featuring an industrial exhibition showing local products produced.
- (2) Conduct a series of radio interviews with industrial employees to increase recognition of the importance of local industries to community welfare.
- (3) Assist management in securing an adequate supply of labor.
- (4) Recommend possibilities for the expansion of existing plants.
- (5) Construct a manufacturers handbook listing industry and products.
- (6) Make market surveys to be available to local industries.
- (7) Select and/or seek plants for which Sedalia offers the best opportunity which include:
 - (a) Plants rendering special services for existing local industries.
 - (b) Those complementary to existing local industry.
 - (c) Industries using particular skill available locally.
 - (d) Processes utilizing local raw materials.

Like any other community, Sedalia depends primarily on its large industries for economic security and welfare. The city has many large industries as a backbone and many small individual industries. Actually, it is the writer's belief that the smaller concerns are most important in the overall economy of the city. This belief has been proven to some extent as seen through economic decline when the large industries have been closed down because of strikes or production difficulties.

Heavy Industry

The foremost heavy industry consists of the Missouri-Pacific Railroad shops. The city gave to the Missouri-Pacific Railroad (then known as the Pacific Railroad) \$40,000 in bonds and twenty acres of land to permanently locate their machine shops nearby.³

The shops were established in the north central sector of the northeast

- 2 The Sedalia Democrat, Sunday, (June 3, 1951), p. 3.
- 3 Mark A. MacGruder, History of Pettis County, p. 222.



Figure 7. MISSOURI PACIFIC RAILROAD SHOPS

quadrant of the city and have remained here for forty-seven years. Composed of twelve major buildings, the shops are all of brick construction with many associated frame buildings. The area covered today is approximately 265 acres.

The number of men employed in the shops varies from year to year but has an average complement of 1500 men. These employees are engaged in all types of maching work. They construct and repair boilers, wheels, axles, and coaches, and reclaim scrap materials. The Sedalia shops have the only reclamation plant in the district; in it over 120 tons of scrap is reclaimed annually.

Sedalia was chosen as the site for this plant because of her central location in relation to the division. At this location she can be of best service to the company and its needs. Also, strongly entering the picture was the adequate labor supply and the favorable living conditions of the city. Previously mentioned, of course, was the financial enticement which Sedalia offered to have the industry located here. The approximate payroll of the Missouri-Pacific shops is \$300,000 monthly, which plays a large part in Sedalia's economy. However, there may be too much emphasis placed upon the shops as being the guide to the city's economy and prosperity. It may well be that future plans should be directed toward the encouragement of small stable industries to bolster this economy in case of a shop lay off, or strike.

The Missouri-Kansas-Texas Railroad Shops

Prior to the year 1899, the Missouri, Kansas and Texas Railway Company

⁴ The Sedalia Democrat (March 31, 1939), p. 6.

maintained a car repair plant in Sedalia.⁵ This plant was located between Fifth Street on the north and Broadway on the south, Hancock on the east and the main line of the railway on the west. This would place the shops in the west central sector of the northeast quadrant of the present city layout.

A new and modern plant was constructed during the years 1897 and 1898, and this plant began operation in 1899. It is located at the southwest corner of Sedalia. The plant was established here because of the geographical location, ready supply of skilled and semi-skilled labor and the fine living conditions the city offered.

The new plant contained the following structures, all of brick constructions⁶ (1) combination store room and office building, (2) combination wood mill, cabinet and pattern shop and power plant, (3) passenger car erecting shop, (4) freight car erecting shop, (5) passenger car paint shop, and (6) combination blacksmith and machine shop.

In addition the plant includes the following wooden structures: (1) oil house, (2) repair track supply room, (3) blacksmith coal shed, (4) blacksmith tool shed, (5) two lumber sheds, (6) tin shop, and (7) general supply room.

When put into operation, this plant employed 225 men, their work consisting of building and repairing passenger train cars, freight cars and company work equipment. In addition, considerable office furniture was renovated and built. Signs used on the railway also were manufactured here. No locomotives were built but all locomotive pilots and cabs were manufactured.

5 F. F. Durham, Chief Clerk, Missouri-Kansas-Texas Railway, Correspondence, March 16, 1951.

6 Ibid.

Hand cars were overhauled and rebuilt.

The plant was enlarged from year to year and the labor force was likewise increased. The largest employment occurred in World War I when 1,000 men were employed. Today between 300 to 500 men are hired. Now the establishment is chiefly a passenger car repair shop. It contains the latest machinery to efficiently handle the maintenance work of passenger cars. The plant also does considerable work in making and repairing office furniture.

The Pittsburgh-Corning Glass Plant

The Pittsburgh-Corning Glass factory is located one-half mile west of Sedalia on Sixteenth Street. The plant includes two separate divisions. One manufactures glass construction blocks and other foam glass insulation. The company is a subsidiary of the Pittsburgh Plate Glass factory. Pittsburgh-Corning glass blocks are used in all types of construction work, especially in school buildings. They are used both in new construction and in sash replacement. These blocks serve a two-fold purpose in that they are of high insulating quality and allow a maximum of light.

Pittsburgh-Corning foamglass is manufactured as bubbles which contain still air and form a continuous fibrous cellular material. This insulation material has high resistance to moisture, vapor, fumes and acid atmospheres. It is being widely distributed as a roof and wall insulation since it is non-combustible, odorless and vermin proof.

The Sedalia plant serves all of the United States west of Ohio with these two products.⁷ These products are also shipped from this plant to

⁷ O. W. Wiley, Manager, Pittsburgh-Corning Glass Factory, Sedalia, Missouri, Conference, February 10, 1951.



Figure 8. PITTSBURGH CORNING GLASS PLANT

Canada and Moxico.

The central location of Sedalia, with its rail facilities, makes it most advantageous as a distribution center for the vestern half of the United States. The plant is located one mile south of the main railroad line on a "spur" track. The ready supply of labor, fine rail facilities and good living conditions were of primary importance in the selection of the city as a site. Of secondary importance, but requisite, was the gas facilities available, as the factory uses this fuel for heating.

Other minerals used in this industry are silica sand, soda ash, lime-8 stone, nephelyn syonite, borax, salt coke and nitrate. Silica sand is the largest single item required which, fortunately, comes from Festus, Missouri, approximately 198 miles to the east. The soda ash supply comes from Corpus Christi, Texas. Suitable limestone is obtained from northern Ohio. Nephelyn syonite is shipped in from Canada. The smaller items such as borax and salt coke originate in California and Nevada. The nitrates are usually obtained from Chile. These mineral ingredients would have little or no value to the average consumer, so it can readily be seen that the company products have a high "value added."

The employment of this plant totals approximately 400; each plant using 200 employees.

The Home Building Corporation

The Hone Building Corporation is a manufacturer of pre-fabricated houses. The plant is situated in the north sector of the northwest quadrant along

9 Ibid.

⁸ Wiley, op. cit.

the Missouri-Pacific railroad.

The home manufactury located here because of the following reasons:

- (1) transportation facilities, both by rail and highway
- (2) inducements provided by the city
- (3) banking and other credit facilities
- (4) central location in relationship to trade territories of St. Louis and Kansas City.

This firm produces three types of houses, with or without a garage. These homes are manufactured in sections, and such pre-fabrication permits construction by simply assembling the pieces.

The corporation today employs approximately seventy people. The production is on a semi-assembly line basis, with an average output of one house per day. One-half of the total yield is absorbed by a subsidiary in Kansas City and the other half of the production is sent to dealers in Illinois, Iowa, Missouri, and Kansas. The company did approximately two million dollars worth of business in 1950.

The raw materials used by the Home Building Corporation are basically semi-finished and are purchased directly from the manufacturer. The wood materials are composed of hardwood plywood which is shipped from Georgia, and softwood plywood which is from the Pacific Northwest. Also, there is trim material which comes from northern Arkansas, and structural materials which come chiefly from Arizona, Oregon and Washington. Oak flooring is shipped from Tennessee and Kentucky.

The heating units and furnaces used are manufactured in St. Louis and Kansas City. Necessary bathroom facilities, pipe, plumbing, and tile are shipped from Detroit, Michigan. The required glue is purchased in Pennsylvania

11 Ibid.

¹⁰ Neal O. Reyburn, President, Home Building Corporation, Sedalia, Missouri, Correspondence, February 23, 1951.

and paint from Ohio. Some insulation materials are shipped from Kansas City and New York. Roofing materials and hardware are obtained from Joplin, Missouri and the states of California and Pennsylvania. Sheet metal and wiring are purchased from Ohio, Kansas City, Missouri, and New York City.

These are the materials which are combined into the finished product of a prefabricated house. Separately, these materials have considerable, but the high value added is when they are brought to a centralized point and assembled into a home. It can be seen from the location of the raw materials that they are mostly derived within a circle of two hundred miles radius from Sedalia, pointing out its highly advantageous situation in an industry of this character.

The American Disinfecting Company

(Adco Incorporated)

The American Disinfecting Company was founded by J. R. Van Dyne in 1908. Mr. Van Dyne was the originator of a soluble pine disinfectant. He was originally employed by the Missouri-Kansas-Texas Railroad Company and Adco, Incorporated was an idea that found realization for him. The writer mentions this because there were no particular geographical principles involved in the location of this industry, except that this was a railroad center that made a favorable distribution point. Many laborers in Sedalia and the railroads had a need for this type of product.

The main plant is located in the west central sector of the northwest quadrant of the city. Today the plant produces insecticides, disinfectants, 12 floor seals, liquid waxes, deodorants, liquid scaps and cleaning compounds.

¹² Charles Van Dyne, Vice-President, Adco Incorporated, Sedalia, Missouri, Conference, March 22, 1951.

During the winter eighty per cent of the production is concentrated on the dry cleaning solvents, and twenty per cent is devoted to the other chemicals.

Along with the production department, a modern research laboratory is maintained, experimenting for new methods to better maintain cleanliness and sanitation, dispell odors and suppress insects. Absolute chemical and thermostatic control over all phases of production is maintained by this laboratory.

Situated on the main line of the Hissouri-Pacific railroad, the main plant building faces south assuring maximum light and sunshine in the winter. There are approximately fifty people employed at all times in this industry. This is about 2.5 per cent of the 2,000 total employees in the other plants in the United States.

The trade territory of Adco is enormous as they ship to all of the forty-eight states and ship to thirty-two foreign nations. All shipments are sent to St. Louis by truck or train and from there to New York or New Orleans by railroad. The foreign countries by geographic regions included in Adco's trade territory are:

South America	<u>Central America</u>	Europe
Argentina	Cuba	Belgium
Bolivia	Ecuador	Bulgaria
Brazil	Guatemala	England
Chile	Honduras	Greeco
Columbia	Mexico	Ireland
Peru	Porto Rico	Italy
Uruguey	Salvador	Spain
Venezuela		-

13 Van Dyne, op. cit.

14 Al Fabray, Chief Chemist, Adco Incorporated, Sedalia, Missouri, Conference, March 22, 1951.

50

Africa

Australasia

British East Africa Egypt Union of South Africa Australia New Zcaland India Japan Near East

Iraq Turkey

<u>Canada</u>

Many of Adco's raw materials must be purchased from foreign countries. These are purchased from importers, usually at New Orleans. The foreign materials are then shipped by rail to Sedalia, via St. Louis. The basic raw materials and where they are purchased or imported from are as follows: carnauba and synthetic wax come from Brazil, coconut oil comes from the Philippine Islands, shellac comes from Ceylon, liquid potash scaps come from the southwest part of the United States, synthetic scap and petroleum solvents come from the Mid-Continent fields of the United States, alkali and caustic soda come from Nevada, New Nexico and South California, and parafin wax, anyl acetate, butyl alcohol, hexelyne glycal, and glycerine come from various cities in the United States. These products have very little value except to the chemist, and as a result of their cellection and combination, Adco's products have a high value added.

Sedalia's heavy industry tends to continuously employ between 2000 to 3500 men. These industries are classified as heavy industries because of the large type of product and the process and raw materials utilized. The industry tends to remain stable although smaller companies should be encouraged to develop to cushion the economy in case of lay-offs or strikes by the larger establishments.

15 Fabray, op. cit.

CHAPTER VI

THE PROCESSING INDUSTRIES

In the processing industry the main locational force is the availability of raw materials. The major function of these industries is to make goods ready for shipment by reducing their bulk or perishability and preparing the product for consumption or further manufacture. Reduction in transportation costs due to processing are sufficient so as to locate the factories near the source of the raw materials. Fundamentally their chief function is to perform the final stage in making the products of local farms and mines ready for shipment to markets.

Since the processing industry is associated in Sedalia primarily with the agricultural products from the surrounding areas, it is important to review at this time some agricultural statistics of Pettis county. Pettis county is primarily Sedalia's trade territory both in its yield of raw materials and its purchase of finished products.

The principal crops produced include corn, oats, wheat, soybeans, rye, grain, and forage sorghums and hay including legumes and grasses. There are 217,626 acres of crop land in the county, 107,195 acres of plowable pasture, 33,835 acres of timber land and 64,875 of diversified or combinations of the above types.²

1 Harold Hull McCarty, The Geographic Basis of American Economic Life. Harper and Brothers, p. 488.

2 Harry Morrison, Agent, County Farn Bureau, Sedalia, Missouri, Conference, March 22, 1951. The following table will give the reader a more definite picture as to the size and number of farms supplying raw materials to these diversified industries.

Table VIII

Number of Farms By Size In Pettis County

Under 10 acres	123	180-219 acres	195
10-29 acres	195	220-259 acres	169
	190	260-379 acres	244
30-49 acres			
50-69 acres	142	380-499 acres	104
70-99 acres	263	500-699 acres	61
100-139 acres	383*	700-999 acres	77
140-179 acres	336*	Over 1000 acres	12
		Total	2391

The greatest number of farms as shown by the asterisks in the table above, may be put in one grouping. This grouping has 719 farms, almost thirty-three per cent of the total. These are farms from 70 to 139 acres in size, showing this size span to be the most economical and popular to farmers of this region.

The main products that the farms produce have been mentioned previously, but the following table shows how much of the individual raw materials are available for Sedalia's processing industries.

Table IX

Annual Agricultural Products of Pettis County

Product	Amount	Product	
Apples	5,746 bushels	Oats	1,108,980 bushels
Barley	179,950 bushels	Peaches	5,651 bushels
Chickens	2,208 raised	Pears	2,705 bushels
Corn	1,292,070 bushels	Rye	3,060 bushels
Eggs	2,226 dozen	Soybeans	9,520 bushels
Grapes	100,130 pounds	Strawberries	28,349 quarts
Hay	34,460 tons	Tobacco	4,360 pounds
Milk	3,466,967 gallons	Wheat	371,760 bushels

3 Morrison, op. cit.

4 Sixteenth Census of United States, Statistics by Counties, Washington, D. C., United States Department of Commerce, Bureau of Census (1940). The livestock raised in this county is principally hogs, beef cattle, dairy cattle, sheep and poultry.

Table	X		
Livestock Population	<u>oi</u>	<u>Pettis</u>	County ⁵
Cattle Chickens Hogs Horses Milk Cows Mules Sheep Turkeys		32,530 290,080 37,990 6,330 10,900 2,610 16,330 21,080	

Many of the agricultural products listed, such as fruits and vegetables are sold directly by the farmers to the retailor or ultimate consumer by house to house methods. The principal raw materials used by the processing industries consist of milk, eggs, and the grains.

Sodalia has three small packing establishments which do custom packing or wholesaling on a very small scale. These establishments employ only six to eight men. Most of the meat is shipped to large packing concerns in St. Louis, where it is processed and later re-shipped for retail sale.

Beatrice Foods Company

The Sedalia plant is a subsidiary of the Beatrice Foods Company of Chicago, Illinois. This plant produces goods under the rotail name of Meadow Gold products.

The plant employees ninety people with the monthly payroll being approximately \$22,291. Six persons are employed to do statistical office work,

5 Census Reports, op. cit.

6 J. H. Bagby, Manager, Beatrice Foods Company, Sedalia, Missouri, Conference, May 29, 1951.

three are engaged in research and eighty-one production and maintenance em-

This plant is primarily an ice crean manufacturing plant, although some manufacturing of cottage cheese is done. The Sedalia plant produces 100,000 gallons of ice cream per month in the summer time. This consists of five gallon, two and one-half gallon, quarts and pint containers, along with dozen packages of novelties. They also produce approximately 60,000 pounds of cottage cheese dry curd monthly.

The main raw material used in this production is milk. All of the milk used is from Pettis County farms, which is trucked into the Sedalia plant daily. The milk receiving department has 250 producers living on eight organized and serviced milk routes. The plant purchases approximately 733,450 pounds of milk monthly from these farmers. ⁷ Approximately \$25,000 is paid monthly to these farmers for their raw material.

The Sedalia plant has a new modern laboratory costing approximately \$7,000.00. Two skilled technicians are in charge of testing and research work. Every month a sample test is run on all milk patrons. This is a microscopic test for bacteria. Daily, fifty samples are run on a complete analysis of bacteria, butter fat and total solids.

The only other raw materials used besides milk and crean are sugar, malts and assorted flavoring extracts, <u>i. e.chocolate</u>, artificial cherries, strawberries, etc. which are purchased from wholesalers and not the direct producer.

Ice cream and cottage cheese are the only products manufactured, although this plant acts as a distribution center for butter, cheese, salad dressing,

7 Bagby, op. cit.

and oleomargarine manufactured in Des Moines, Iowa and sent to Sedalia for distribution.

Central Missouri is the main trade territory, although they supply Kansas City and St. Louis as well as southern Missouri with many novelty ice cream products. The wholesale department has three refrigerated trucks serving the central Missouri area and eight transport trucks serving the previously mentioned fringe areas. The plant maintains a twenty-four hour service department, servicing all of their three hundred accounts with the best refrigerator service obtainable, free of charge.

Tullis and Hall Dairy

The Tullis and Hall Dairy is an outgrowth of a wholesale ice crean manufacturing concern and was established by Mr. V. V. Tullis in 1932.⁸ The company now sells milk, cottage cheese and cream wholesale and retail and ice cream retail.

The chief raw material used is milk which is received from surrounding farms. Tullis and Hall purchase approximately 75,000 pounds per day in the summer, but, of course, this purchasing and the business in relationship to ice crean is highly seasonal. The wholesale and retail milk business is rather constant throughout the year. Mr. W. W. Greer points out that there was little or no milk production in Sedalia until after 1906. Before this time all milk products needed for the ice crean business were shipped in from Illinois or Kansas. The milk is now brought to Sedalia either by local haulers who have pick-up routes, or by the producers themselves.⁹

9 Ibid.

⁸ W. W. Greer, Manager, Tullis-Hall Dairy, Sedalia, Missouri, Correspondence, February 24, 1951.

Other raw materials used by the dairy are, of course, the associated fruits and flavoring that are purchased from local wholesalers or from St. Louis or Kansas City houses. Boxes and cartons are purchased from paper manufacturers in Kansas City and bottles are usually purchased from Owens Glass Company of East St. Louis, Illinois.

At present, the dairy delivers milk, cheese to wholesale outlets, <u>i. e</u>. grocers, restaurants, within a radius of fifty miles of Sedalia. The main trade area however is in Sedalia proper.

Tullis and Hall employ approximately forty people all through the year with an approximate increase of ten persons in the summer. The money spent by local processors for milk, labor, and miscellaneous supplies will run into many tens of thousands of dollars annually. No accurate figures, industry wide, for the area are available at this time.

Swift and Company

The Swift and Company plant in Sedalia is a dairy and poultry plant founded there in 1905.¹⁰ The main reasons this plant was established in the community are; (1) mearness to raw materials, of which production in this area is heavy, (2) fine transportation facilities, both rail and road, and (3) suitable supply of labor.

At the time this plant was established, practically all poultry was shipped to the eastern markets, packed and frozen. During the past several years the trend of the poultry business has been to an ice-packed product sold in the city and to nearby cities. Today, chickens are still a leading

¹⁰ Robert L. Walje, Assistant Manager, Swift and Company, Sedalia, Missouri, Correspondence, February 16, 1951.

raw material. Broilers are the specialty and are purchased in the Sedalia area, southern Missouri and quite a large quantity from Arkansas. These chickens are ice packed and sent to nearby branches for distribution. The company also purchases eggs, which they break, then freeze or dry, and send to nearby branches. Eggs are candled and sold in the Sedalia area fresh. Butter, too, is manufactured in this plant and sold locally. Raw milk is obtained from the surrounding farms.

This Swift and Company plant acts as a distribution point for ice cream that is shipped in from Kansas City by transport truck. They supply communities within a fifty mile radius of Sedalia with all of the various products mentioned. The type of work the industry does is highly seasonal and the number of employees varies from 125 people in the winter to 200 in the late spring and summer.

System Mills

System Mills is the only large flour and grist mill in Sedalia at the present time. The small communities around Sedalia g. g. Dresden, Knobnoster, Smithton, Greenridge, all have their own mills, so that it is not necessary to bring the raw materials into Sedalia for processing. The mill in Sedalia does processing storaging and retail selling.

The raw materials are purchased from Pottis County farmers. The main l2 grains used are wheat, corn, barley, oats and rye. These are processed and the mill then manufacturers flour, corn meal, whole wheat flour, graham flour, dairy feed and poultry feed. These finished products are sold retail at the mill and are distributed to other retail outlets.

¹² Henry Blaine, Owner, System Mills, Sedalia, Missouri, Correspondence, June 21, 1951.

The fine highway facilities of Sedelia are especially advantageous to this industry as most of the finished products are shipped by truck. The mill has five trucks operating in the local area and in central Missouri. The city is centrally located in respect to these thirty-six counties, or trade territory of the mill.

At the present time there are twenty-five people employed by System Mills. Of these, two are employed to do secretarial work, five are truck driver, five are salesmen, three are buyers, and there are ten laborers in the plant.

Missouri Farmers Association

The Missouri Farmers Association is a cooperative association dealing in agricultural products. Through the Association, the farmers who are members bring their row materials in, are paid the market price and are allowed to buy finished products as cheaply as possible. The Association does not have a mill in the strict sense of the word, because it has no storage capacity, but does only processing.

Farn produce purchased include corn, barley, cats, rye, eggs, cream and poultry. These are received from farmers of the central Missouri area, within an approximate fifteen mile radius of Sedalia. At present the Missouri Farmers Association has seven employees engaged in processing these materials. Other than dressing poultry and candling eggs, laying mash, dairy feed, job feed and flour are manufactured.

Taystee Bread Company

The Taystee Bread Company is one of the largest manufacturing concerns of its kind in central Missouri. Sedalia's pivotal location and fine highway facilities have proved especially advantageous to this company as it has to

some of the others described above. The plant is not the small local type bakery, but is of a size to serve all of central Missouri with this type of finished product. The trade area is comprised of an area approximately within a forty mile radius of Sedalia. All of the marketing shipments are dono by truck, Taystee operating eleven trucks.

The materials used in this industry are flour, powdered milk, shortening, salt, sugar and yeast. These are purchased from local wholesale dealers. Taystee manufactures all types of package rolls, semi-cooked rolls, buns, and loaves of bread. The company employees approximately fifty-one people at 14, present and the production output is 16,000 loaves of bread per day.

The Bagby Hatchery

The Bagby Hatchery is one of the leading hatcheries of Sedalia today. Others in the city are the Sedalia Hatchery, Rice Hatchery, and the Ivan Berry Hatchery, but the Bagby Hatchery has been chosen as a representative example. This plant is primarily concerned with raising baby chicks although they have some sidelines such as selling feeds, hatchery equipment and fertile eggs.

The company purchases its hatching eggs from farmers of Pettis County. They buy approximately 2,250,000 eggs per year from these farmers. Through the use of artificial incubation they produce 1,500,000 chickens yearly. The hatchery employees around twenty-one persons who are engaged in taking care of the chicks and in general labor activities.

Sedalia's centralized location and fine transportation facilities are

13 Elmer Dillard, Manager, Taystee Bread Company, Sedalia, Missouri, Correspondence, June 21, 1951.

14 Ibid.

highly advantageous to this type of industry where quick deliveries are essential. The Bagby hatchery ships the chicks to many points in the United States, although the main trade territory is in central Missouri.

Hence, a picture of Sedalia's representative processing industries shows their significance and relation to geographic factors, particularly location, raw materials, transportation, and labor. As this local industry is primarily concerned with food and related products, it is noticeable that Sedalia has many large and small industries of this type. The writer has picked only the best representations of this industry because it would be beyond the scope of the study to discuss all of the small individual ones. The agricultural processing industries are situated in Sedalia because of the heavy production of agricultural products in the area, the fine transportation facilities provided and the good market which permits disposal of the finished product.

CHAPTER VII

THE DIVERSIFIED INDUSTRIES

The classification of diversified industry is self explanatory as to designation, and the category is applied to all of the industries which are out-of-the ordinary in character or handle specialities. There are a few large industries to be considered in this classification, for the core of the diversified industry is small industrial establishments employing from five to fifty people. It would be possible to classify this industry as specialized.

Town and Country Shoe Company

The Town and Country Shoe Company specializes in the manufacture of women's shoes and associated leather goods, such as belts and purses.

In 1928, Forstmann, an Englishman, patented a new cushion type inner l sole for shoes. This sole was developed around 1941 into what is known as the slip-lasted shoe. Slip last is a process wherein a last is built within a last. The basic mold is built upon which the uppers are constructed, and within this mold the slip last is constructed, making it possible to give more exact fits to individual needs.

In 1943 Town and Country entered the field utilizing the slip-last in the production of women's shoes. The factory has, in previous years, noted a peak and valley production pattern. The peak usually occurs in late

¹ C. W. Mathieson, Vice-President, Town and Country Shoe Company, Sedalia, Missouri, Conference, March 23, 1951.

spring and the valley happens in early winter. Today, none-the-less the company is operating on a high plateau year round in which full production is the case.

The company employees 440 people in the plant. These employees are mostly women who do the pattern making, molding and stitching of the shoes. A few of the employees are men who do the trucking, packing, and managerial work. Eighty-five per cent of the workers are from Sedalia proper while the remaining fifteen per cent commute from distances of seven to twelve miles from Sedalia.²

This plant initially was located here because of its central location in the United States, the good supply of the necessary type of labor, the fine transportation facilities and the overall type of personnel desired.³ The location and transportation are especially advantageous, as the company brings together raw materials from all parts of the United States and distributes finished goods to many areas of the world.

The raw materials required are tanned calf skins, kid leathers, specialty skins, fabrics, thread and packing boxes. These are all finished or semifinished goods in their own right, but it is not until they have been constructed into shoes that they have value to the ultimate shoe consumer. These leathers are purchased already tanned from New York City, Philadelphia, Pennsylvania and Boston and Peabody, Massachusetts. The threads and fabrics are shipped from the New England states. Town and Country has a shoe box which has an advertising cover depicting modes of transportation throughout the years; this they have patented and manufactured both in St. Louis and Kansas

3 Ibid.

² Mathieson, op. cit.

City.

After the shoes are constructed, they are distributed both by truck and rail to all of the metropolitan centers of the United States. The company also exports shoes to the metropolitan centers of Canada, Hawaii and to Bermuda.

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J. A. Lamy Manufacturing Company

The J. A. Lamy Manufacturing Company was founded in 1366, mainly as a jobbing and tailoring concern, but the founders scon saw the possibilities of manufacturing work clothing, as Sedalia was a leading shipping point. For illustration, the volume of cattle shipped from Sedalia at that time was larger than the number shipped from Kansas City, showing the influx of farmers who needed work clothes.⁴ Also, there was quite an influx of railroad workers. This location next to the market, plus fine transportation facilities and a good supply of labor are the primary reasons for the plant's location.

In 1893 the company was incorporated and the manufacturing end was greatly expanded with the construction of a three-story brick building which it still occupies. Since its construction the original building has been added to eight times, and the factory now includes an entire city block, approximately 400 by 400 feet in size.

Gradually the manufacturing of work clothing replaced the jobbing of men's furnishings until 1944 when the company dropped the jobbing to devote its entire interests to manufacturing.

The company at present has about four hundred employees with a

⁴ John Pehlam, Plant Engineer of J. A. Lamy Manufacturing Company, Sedalia, Missouri, Correspondence, February 28, 1951.

production payroll of approximately one million dollars.⁹ This employment has increased through the years, but for the last twenty years it has been a stable industry with good production at all times.

The entire production is devoted to western type waist overalls and is in excess of a million and a half pairs per year. The trade area covers the United States between the Atlantic seaboard and the Rocky Mountains. The company is now under contract of the Levi Strauss Company manufacturing Levi overalls (western pants).

The raw materials used in this industry are denim which comes from North Carolina, thread which originates from different points in the Southeast and Connecticut, and button and rivets which come from the Detroit, Mickigan area. These are shipped to Sedalia by railroad. Such raw materials would have little value except to the experienced seamstress, and as a result the completed products have a considerable value added by manufacture.

Large parts of the outgoing shipments are made by truck due to the speed with which shipments are made as compared to the cheaper, but slower, rail shipments. The location of this industry, it appears, in conclusion, is likewise a picture of Sedalia's growth through marketing, transportational and labor possibilities.

The Zephyr Manufacturing Company

The Zephyr Manufacturing is the outcome of earlier manufacturing concerns which evolved to be the present one. The initial Acme Broom Company was succeeded by the Acme Manufacturing Company in the early 1940s when the manufacture of various types of mops was undertaken along with a regular

5 Pehlam, op. cit.

line of brooms. In 1946 the name of the company was changed to the Zephyr Ecanufacturing Company, an outgrowth of the fact that Zephyr was a name used on many of the type of brooms manufactured.

This company manufactures cellulose sponge yarn nops, deck mops, dust mops, yarn polish mitts, flexible industrial dust mops, chanois mops, water mop heads, dish mops, regular brooms, whick brooms and all types of specialty mops and brooms.⁶ This line of products might be an insight into why the company changed its name for no longer is it a broom factory but an industry turning out a multitude of finished cleaning products.

The number of people employed today in this plant is approximately seventy. It has varied through the years up to a maximum of one hundred. Although production is at the highest point today, through better methods and machinery the total number of employees has decreased.⁷

The raw materials used in the manufacture of these goods consist mainly of broom corm, cotton yerns, and the required handles. The broom corm used comes from Texas, Oklahoma, Colorado, and New Mexico. Some broom corm, although small quantities, is obtained from Western Kansas and Central Illinois. The cotton materials, generally, come from widely scattered sources with no specific ones. Cellulose yern used in some of the products is obtained as a finished product from Dupont, Incorporated. The handles used at this time are fir handles and come from the Pacific Morthwest. These handles have been found superior to the hardwoods of the southern states.

The location of Sedalia is very advantageous to this industry. This location coupled with transportation and labor supply are the main reasons

⁶ R. J. Lindstrom, Vice-President, Zephyr Manufacturing Company, Sedalia, Missouri, Correspondence, February 16, 1951.

for the location of the industry. Sedalia is a central area for the gathering of these ray materials and their combination into a finished product.

Sedalia itself serves as a large part of the market for these products and St. Louis and Kansas City also utilize them. The products are shipped to many of the mid-western metropolitan centers, and to South America, Bermuda and the Hawaiian Islands. Sales are also made to exporting firms but information about the receivers is not available.

Parkhurst Trailer Company

The Parkhurst Trailer Company is a specialty industry, manufacturing wagon beds, and all sized trailer and truck beds. The main reasons for the selection of Sedalia as a site for the industry was that there was a market for the product here and its central location. (Besides the manufacturing of the trailers a rental system is a part of this company's function.) Today the company employees forty persons, all of whom are skilled technicians engaged in designing and building new trailers from the ground up.

The raw materials used are steel, iron, lumber of various sizes and dimensions and the connecting materials, such as nails, rivets and bolts. These are made into small automobile trailers, large auto trailers, custom truck trailers, stock beds and wagon beds.

Although some of the products manufactured are standard, the majority of the work is on custom basis and is usually an individual item output basis.⁸ However, the company manufactures approximately 500 wagon beds per year for Montgomery and Ward Company, 125 two ton trailers, 300 small trailers and various types of custom trailers take up the remainder of the production

⁸ Robert Parkhurst, Jr., Owner, Parkhurst Trailer Company, Sedalia, Missouri, Correspondence, June 23, 1951.

time per year.

There are approximately twenty trailers of all sizes in stock for rental purposes which can be had by the hour, day, week or month. The combined facilities of this industry gross approximately \$250,000 per year.

The trade territory is the states of Missouri, Iowa, Illinois and the western half of Kansas. Sedalia's excellent location in reference to this general area plus the fine transportation facilities have proved highly advantageous to this industry.

Lime Products Company

The Line Products Company is engaged in extracting line from quarries located three miles south of Sedalia. The company produces rough line, crushed line and the various line fertilizers. The line is handled loose by trucks or packaged into one hundred pound sacks. The company does cubton spraying and hauling for farmers of this territory.

Within the Pettis and Benton county areas, five trucks are operated by the company in the hauling and spreading of line. There are twelve employees, one-half of whom are engaged in transportation and the other half in the extraction. Approximately 20,000 to 30,000 tone of line per year are brought from these quarries.¹¹ The management carries on a close relationship with the various farm bureaus and other state agencies in trying to produce more effective fertilizers and lime use for the benefit of the agricultural population of this area.

9 Parkhurst, Op. cit.

10 Walter Hampson, Manager, Lime Products Company, Sedalia, Missouri, Correspondence, June 23, 1951.

11 Ibid.

The company is located in Sedalia because the mineral resources of limestone is here and because of the market that is located in the farming regions round about Sedalia.

Cramer Haydite Company

The haydite brick, produced by the Gramer Haydite Company, is a material used in the construction of buildings and houses. The demand depends upon building activities within the area and because building activities have been heavy thereabouts, the company was founded in recent years. It is a subsidiary of the Gramer Construction Company. Besides Haydite bricks, plain concrete blecks are also manufactured.

The primary raw materials used are send, cement and haydite which is a light-weight burned shale.¹² As previously stated, these haydite blocks are used in construction, which, for the most part, is of a local character. The trade area is defined as Sedalia proper.

The company employes ten people who manufacture approximately 150,000 13 blocks annually. This type of product has rivaled the old cinder block type which was formerly shipped in from Kansas City. The market in this area is probably the only factor of importance in the location of this type of industry.

Pepsi-Cola Bottling Company

Within Sedalia there are numerous bottling works, but to discuss all of then will not be necessary. A representative example was chosen in the study

12 Walter Cramer, Owner, Cramer Haydite Company, Sedalia, Missouri, Correspondence, June 23, 1951.

13 <u>Ibid</u>.

of the Pepsi-Cola Company. Amount of production, materials required and type of employees necessary will suffice for an interpretation of the rest of the industry.

Pepsi-Cola Company is a franchised company under the auspices of the original company of Long Island City, New York. The main location factors are the central location of Sedalia, the fine transportation facilities and the market for this beverage product.

This company manufactures bottled drinks and distributes them to retailers within an area of thirty miles radius of Sedalia. They operate three trucks and one trailer truck. One of the trucks has Sedalia as its territory and the other two operate the trade area surrounding Sedalia. The trailer truck hauls daily loads of from three hundred to five hundred cases to outlets in Clinton and Camdenton, Missouri. This industry, of course, is highly seasonal and this observation is made in the summer when production is at its highest. The writer believes this to be the representative picture of the industry because the three summer months are when ninety per cent of the business is done.

The raw materials used in this industry are sugar, water, concentration, bottles, caps, cartons, cases and CO₂. The majority of these are purchased through wholesalers and are not bought direct. Sugar is purchased through a local wholesaler. Concentrate from Pepsi-Cola comes from the home company shipped through Louisville, Kentucky, while concentrates for the various other flavors are purchased through houses located mainly in St. Louis. Bottles are obtained primarily from Owens Glass Company of Illinois and caps and cartons are shipped from areas in the east. Water is a necessary bulky raw material and a good water supply is fortunately found here. The Pepsi-Cola Company uses approximately 24,000 gallons of water a day in the summer. Carbon dioxide is purchased from the Liquid Carbonic Corporation of Kansas City and is shipped in fifty pound blocks to the Sedalia plant.

The plant in summer manufactures approximately 1500 cases per day with twenty-four bottles to the case. They employ between twelve and fifteen persons.

Other small industries of this classification and employing from three to ten personsare: Bryan and Battles Awning Company, Paulus Awning Company, Dixie Kitchen, Graham Concrete Works, State Fair Floral Company, Phieffer Floral Company, Archias Floral Company, Dunn Beverage Company, Dr. Pepper Bottling Company and the Coca-Cola Bottling Company. These industries produce goods of the diversified type which they sell both wholesale and retail.

The entire classification is composed of similar industries producing out of the ordinary goods and specialty products.

CHAPTER VIII

MODERN DEVELOPMENT OF THE CITY

Situated approximately midway between St. Louis and Kansas City, and surrounded by a flat rolling prairie, the division point of two railroads and the crossing point of two United States highways, Sedalia stands today as the "Queen City of the Prairies."¹ Her success or development is based mainly on geographical location and in turn through this location, on the fine transportation facilities developed there.

The present population is approximately 20,208 and for a city of this size, Sedalia has many cultural and social advantages.² By this term "advantages" is meant as it is a place in which to live, among cultivated and skilled people, with good health conditions, modern conveniences, and economic conditions.

In discussing Sedalia's modern development, the writer will limit the time element to approximately the past twenty years. The problem at hand is to see what changes have occurred, <u>i.e.</u> industrial, social and economic, within Sedalia and how these changes have strengthened the city as a cultural and economic organism.

The growth of the community during the last twenty years is almost unnoticeable except for a peak during the years 1942-1945 when the Sedalia Army Air Base was in operation. The new industry and business in the city

2 <u>Ibid.</u>, p. 230.

¹ Mark A. MacGruder. <u>History of Pettis County, Missouri</u>, p. 229.

has been sufficient to keep the population at 20,000 but the demand for employees is stationary. Present industries absorb the available labor supply and any new industries will tend to replace old ones, taking up any slack in the labor supply.

In spite of its fine geographical endowments, Sedalia is overshadowed by the great metropolitan centers of Kansas City and St. Louis. Because of the control location between them, Sedalia's present and future size will tend to remain constant at the 20,000 mark, unless some local or regional population aggrandizement development occurs.³

The area occupied has grown in size during the last twenty years, probably as a result of decentralization. Recent figures show that Sedalia has built five hundred new houses, but has added only six new streets in the last ten years. ⁴ These are Winter, Summer and Autumn Streets, West Thirteenth Street Road, Crescent and Liberty Park Drive. The streets with seasonal names and Liberty Park Drive are located in the west central sector of the northwest quadrant. Crescent Drive is in the north central sector of the southeast quadrant and West Thirteenth Street Drive in the central sector of the southwest quadrant. Associated with these streets, of course, is a building program including many new homes.

The new homes along Winter, Summer and Autumn Streets are mostly prefabricated structures classified as Cwl and Bwl. These were built on undeveloped land north of the main park during the last four years. The homes along Crescent Drive proper were built during the last ten years and are primarily Bbl and Bwl. Buring the last five years a construction program has

³ Robert Crisler, Department of Geography, Washington University, St. Louis, Missouri, Correspondence, April 10, 1951.

⁴ James Collins, Cîty Engineer, Sedalia, Missouri, Correspondence, June 7, 1951.

been developed extending two blocks east and west of Grescent Drive and these homes are classified as Gwl - Bwl. There has been extensive building too along West Thirteenth Street in the 1500 block and the region south of Twelth Street. These homes are mostly Bol and Bbl classifications, although there are several Abl homes scattered in this area. These are the three main areas that have seen growth of homes, within the city limits, during the last ton years.

Although there have been only six new streets added to the city in the last decade, there have been a lot of new improvements to the old streets. It can be seen from the functional division map on page 22 that Sedalia has a very definite rectangular street pattern with numerous through streets, enabling one to reach all parts of the city while following only one or two streets. These main thoroughfores are the ones that have been improved in the last ten years.

Broadway Boulevard, a centrally located through street, has had a new macadamized surface. It connects the eastern city limits with the western city limits. Third street, which serves as a main connecting link between east and west, was formerly brick surfaced, but was covered by macadam materials. The main street of Ohic Avenue, which runs from Eighth Street to First Street, also was brick but has now been covered with macadam. Taking the central area as a whole, almost all of the streets are macadam, brick or concrete. Only a few outlying streets and a few connecting links are graveled. There are very few dirt roads within the city limits. The difference in materials in the roadbeds shows that Sedalla has gone through many stages of development and that the city is no longer young.

Sedalia's growth has been a growth in horizontal proportions and not in the vertical. The business district, although containing some buildings of six and seven stories, has expanded in all directions. It has spread

along the connecting streets instead of stopping and growing vertically along one or two main arteries. The residential sections take on the same general picture, although there are many large apartment buildings. Even so, the trend has been to expand horizontally with many individual dwellings, particularly in recent times.

Development might well be measured by the type of organization she possesses both social, economic and political. Sedalia's importance as a municipal center is also measured by the government and fraternal organization found within the city. A list of these organizations appears sufficient to show the ramifications. They are as follows:

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A. Business Organizations

- 1. Automobile Club of Missouri
- 2. Better Business Bureau
- 3. Chamber of Commerce
- 4. Coal Dealers Association
- 5. Missouri Retail Grocers
- 6. Pettis County Farm Bureau
- 7. Pettis County Rural Letter Carriers
- 8. Post Office Carriers Association
- 9. Retail Merchants
- 10. Sedalia Credit Association
- 11. Sedalia Retail Grocers Association

B. Charitable and Character Building Organizations

- 1. Alcoholics Anonymous
- 2. American Red Cross
- 3. Boys Work Council
- 4. Colored Day Nursery
- 5. Community Chest
- 6. Council of Girl Scouts
- 7. Infantile Paralysis Society
- 8. Melita Day Nursery
- 9. Salvation Army
- 10. Sedalia Teen Age Club
- 11. Sedalia Youth Council
- 12. Tuberculosis Society

5 Directory of Organizations. Sedalia Chamber of Commerce, Sedalia Times, (1947).

- C. Churches
 - 1. Baptist
 - (a) Calvary
 - (b) East Sedalia
 - (c) First
 - (d) Wards Memorial
 - 2. Christian
 - (a) East Broadway
 - (b) First
 - 3. Christian Science
 - 4. Episcopal
 - 5. Evangelical
 - 6. Hebrew
 - 7. Latter Day Saints
 - 8. Lutheran
 - (a) St. Pauls
 - (b) Trinity English
 - 9. Methodist
 - (a) Epworth
 - (b) Fifth Street
 - (c) First
 - (d) Free
 - (e) Grissom Temple
 - (f) Quinn Chapel
 - (g) Taylor
 - 10. Presbyterian
 - (a) Broadway
 - (b) Congregational
 - (c) Cumberland

11. Roman Catholic

- (a) Sacred Heart
- (b) St. Patrick
- (c) St. Joseph

12. Seven Day Adventist

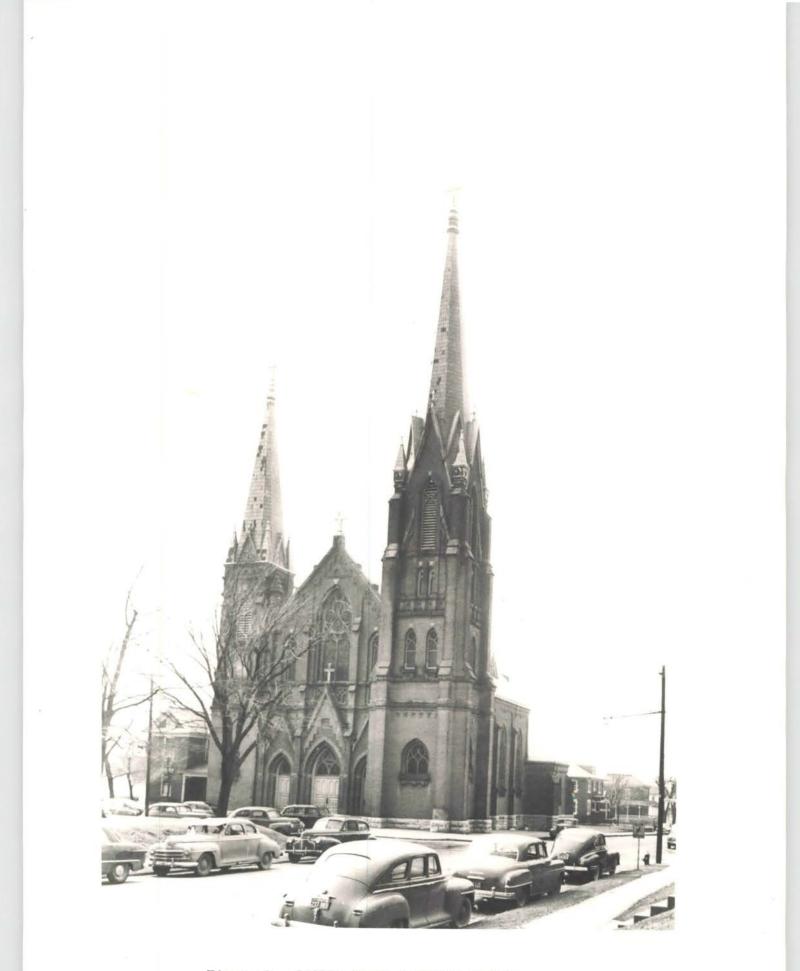


Figure 9. SACRED HEART CATHOLIC CHURCH

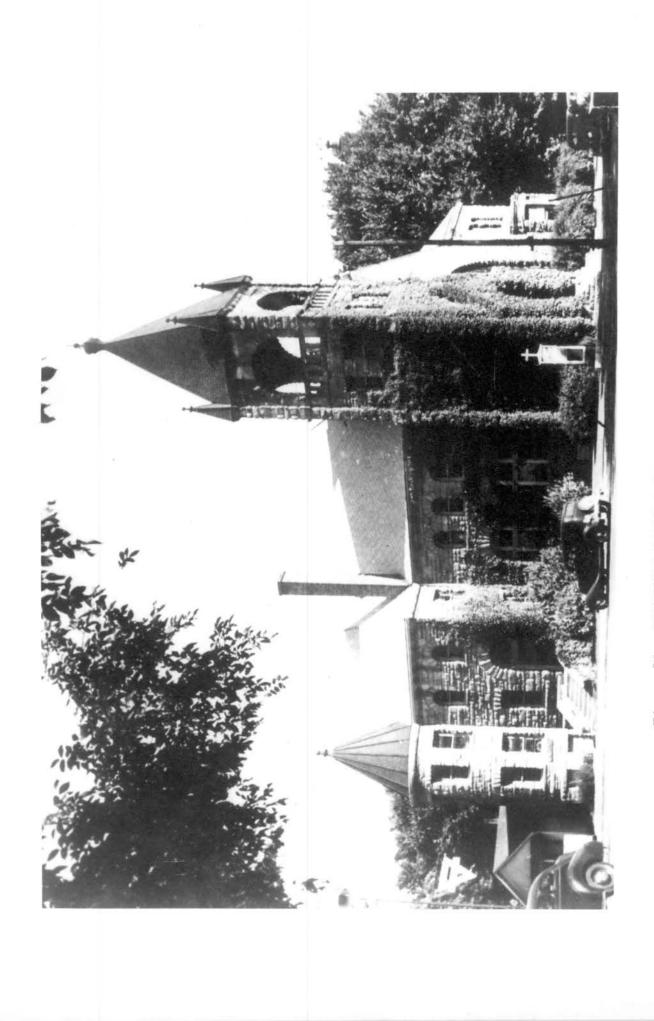


Figure 10. FEDERATED CONGREGATIONAL CHURCH

D. Civic Clubs

- 1. Business and Professional Women
- 2. Kiwanis
- 3. Knife and Fork
- 4. Lions
- 5. Missouri-Pacific Booster
- 6. Optimist Club
- 7. Rotary
- E. Cultural Organizations
 - 1. American Association of University Women
 - 2. American Rose Society
 - 3. Beta Tau Beta
 - 4. Sedalia Garden Clubs
 - 5. Nu Phi Mu
 - 6. Helen G. Steele Music Club
 - 7. Pettis County Historical Society
 - 8. Sedalia Choral Club
 - 9. Sedalia Symphony Society
 - 10. Sorosis
- F. Educational Organizations
 - 1. Board of Education
 - 2. Pettis County Board of Educators
 - 3. Parent Teachers Association
- G. Federal Offices
 - 1. Army Recruiting Office
 - 2. Bureau of Internal Revenue
 - 3. Department of Agriculture Farmers Home Administration
 - 4. Post Office (3 sub offices)
 - 5. Railroad Retirement Board
 - 6. Rent Control Office
 - 7. Selective Service Board
 - 8. Social Security Administration
 - 9. Veteran's Administration
 - 10. United States Postal Inspector
- H. Fraternal Organizations
 - 1. Benevolent and Protective Order of the Elks
 - 2. Independent Order of the Odd Fellows
 - 3. Knights of Columbus
 - 4. Maccabees
 - 5. Royal Arch Masons
 - 6. Modern Woodmen of America
 - 7. National Order of Falcons
 - 8. Royal Neighbors of America
 - 9. Security Benefit Association

- 10. United Commercial Travelers
- 11. Woodmen of the World
- 12. Travelers Protective Association
- I. National Defense Organizations
 - 1. Missouri Mational Guard

 - (a) 35th Infantry Division(b) Battery C, 129 Field Artillery
 - 2. Nevy Club
 - 3. Reserve Officers Association
- J. Nowspapers and Publications
 - 1. Full Cry Magazine (monthly)
 - 2. The Retail Grocer
 - 3. Sedalia-Democrat Capitol (daily)
 - Sedalia-Times Record (weekly) li.
 - 5. Neekly Democrat
- Professional Organizations Κ.
 - 1. Community Teachers Association
 - 2. Ministerial Alliance
 - 3. Pettis County Medical Society
- Recreational and Sports Organizations Ľ.,
 - 1. Central Missouri Ban Johnson League
 - 2. Farmers and Sportsmon Association
 - 3. Junior Legion Baseball Club
 - 4. Sedalia Chess Club
 - 5. Sedalia Athletic Association
- M. Schools
 - 1. Colleges
 - (a) Central Business College
 - 2. Secondary Schools
 - (a) C. C. Hubbard (colored)(b) Smith-Cotton

 - (c) Sacred Heart (parochial)
 - 3. Elementary
 - (a) Broadway
 - (b) Horace Mann
 - (c) Mark Twain
 - (d) Thomas Jefferson

- (e) Washington
- (f) Whittier
- (g) St. Joseph (colored) (h) St. Patrick (parochial)
- (i) Sacred Heart (parochial)
- N. State Offices
 - Bar Administration 1.
 - 2. Highway Maintenance
 - 3. Missouri Division of Employment Security
 - 4. Missouri State Employment Service
 - 5. Missouri State Fair Association
 - 6. Veterans Service Officer

Sedalia also has many diversified veterans' organizations and auxiliaries. There are many union chapters covering all types of trades and artisan skills. Using only the state and federal offices, it can be seen that Sedalia's location is advantageous as an administrative center. The other cultural, fraternal and business organizations show that Sedalia is progressive and needs these organizations to serve her population.

The most important and representative industries are being discussed in other separate chapters, but in modern development it would be well to notice employment statistics.

Table XI				
	Employees In Selective Divisions			
Division	Number employed 1939	Number employed 1943		
Service	278	700		
Wholesale	210	203		
Retail	1586	1850		
Manufacturing	1564	3430		
Farners	3186	4.000		
Others	1000	1500		

From this table it can be seen that two groups have increased appreciably.

6Sedalia Chamber of Commerce Survey, 1943.

The people engaged in manufacturing have doubled, showing an increase in the location of industry in Sedalia and those engaged in the retail division have shown an increase indicating the needs of these extra laborers. Service employees have tripled, although the increase is small, some 422.

Industry today must have accessible modern and adequate banking facilities. The following figures indicate the deposits and resources of Sedalia's banks from 1933 to 1943.

YearDepositsTotal Resources19331,793,0002,238,00019342,152,0002,595,50019352,611,0003,063,00019363,320,0003,725,00019373,390,0003,855,00019383,412,0003,864,00019393,831,0004,312,00019404,202,0002,725,00019414,819,0005,348,00019425,481,0006,038,00019438,371,0008,957,000		Table XII	
19342,152,0002,595,50019352,611,0003,063,00019363,320,0003,725,00019373,390,0003,855,00019383,412,0003,864,00019393,831,0004,312,00019404,202,0002,725,00019414,819,0005,348,00019425,481,0006,038,000	Year	Deposits	Total Resources
0,512,000 0,551,000	1934 1935 1936 1937 1938 1939 1940 1941	2,152,000 2,611,000 3,320,000 3,390,000 3,412,000 3,831,000 4,202,000 4,819,000	2,595,500 3,063,000 3,725,000 3,855,000 3,864,000 4,312,000 2,725,000 5,348,000

The growth has been substantial, amounting to an increase of 300 per cent in deposits and 270 per cent in total assets in eleven years.

Natural gas is supplied by the Missouri Public Service Corporation from pipe lines entering into the great natural gas fields of Oklahoma and the Texas Panhandle. An adequate supply plus reasonable rates has caused this type of fuel to be widely used in industries and home heating. Sedalia, at present, serves twelve customers under the Industrial classification and

7 Missouri Bankers Association of Sedalia Survey, 1943.

8 M. D. Giokaris, Superintendent, Gas Department, Missouri Public Service Corporation, Sedalia, Missouri, Conference, February 20, 1951. during 1950 the total sales amounted to 981,863 million cubic feet. The rates are as follow:

Standard Rate Schedule for Domestic and Commercial Heating

.15 per 100 cubic feet for first 500 cubic feet .08 per 100 cubic feet for next 2500 cubic feet .045 per 100 cubic feet for next 97000 cubic feet .025 per 100 cubic feet for balance of the month

High Pressure Boiler Rate

.25 per Million Cubic Feet for first 100 Million Cubic Feet .20 per Million Cubic Feet for next 900 Million Cubic Feet .17 per Million Cubic Feet for remainder of month

Interruptible Gas Service

.25 per Million Cubic Fect for first 100 Million Cubic Feet .20 per Million Cubic Feet for next 900 Million Cubic Feet .15 per Million Cubic Feet for next 24000 Million Cubic Feet .13 per Million Cubic Feet for balance of month.

The table below lists the number of meters for the respective years. Electric power is also supplied by the Missouri Public Service Corporation.

Table XIII

Year	Gas	Electricity
1933	5134	2794
1934	5250	2654
1935	5350	2936
1936	5592	3077
1937	5730	3165
1938	5848	3200
1939	6066	3336
1940	6205	34.34
1941	6264	34.99
1942	6380	3616
1943	6346	3678
1944	6461	3820
1951	7798	5702

9 Giokaris, op. cit.

Gas meters have increased thirty-three per cent and electric meters have increased about fifty per cent.

Sedalia is served by the Southwestern Bell Telephone Company. Here are situated the district headquarters for this company. The following table shows the number of phones in service for the respective years.

Table XIV

Year	No. of Telephones	Year	No. of Telephones
1934	4275	1940	4828
1935	4349	1941	4916
1936	4450	1942	5083
1937	4463	1943	5342
1938	4525	1944	5640
1939	4682	1951	8562

The number of telephones has approximately doubled in eighteen years. Sedalia has an adequate water system, so equipped and managed that it insures a constant supply in practically unlimited quantities. The United States Department of Interior chemical analysis of the water shows it to be some of the finest in the United States. The following table gives the number of water meters in the city for their respective years.

Table XV

Year	No. of Water Heters	Year	No. of Water Meters
1934	4198	1940	4677
1935	4259	1941	4738
1936	4346	1942	4812
1937	4445	1943	4859
1938	4511	1944	5874
1939	4638	1951	6999

The future for Sedalia lies, as it has in the past, on its geographical location and on its fine transportation facilities. The real roots lie in the progress of the peoples of the city and the attraction of new concerns. To further progress and grow, Sedalia must work with present industry and aim

toward industrial expansion in creating or obtaining new industry. Through its outstanding situation the city has a more promising future than many cities of its size. The transportation facilities are substantial in comparison to other cities, of the United States. Whether it be through inducement and enticement, or through advertisement concerning their advantageous conditions, the community should grow and should become further industrialized. Only one handicap is dominant and that is the nearness and competition of St. Louis and Kansas City. On the other hand, large cities have certain hendicaps which are detrimental to some industries in which case such a community as Sedalia may actually find little competition from them. It is through an educational program directed by the leaders and peoples of the community, that Sedalia will tend to expand and become more industrialized. This program should consist of facts showing the geographical advantages of Sedalia for expansion and development.

CHAPTER IX

S UMMARY

Sedalia, Missouri, as a place in which to live and to support industry, has several distinct advantages and can best be measured by these. Specifically, they are: (1) excellent transportation facilities, (2) centralized location, (3) available water supply, (4) available fuel supply, (5) favorable living conditions, (6) adequate labor supply, (7) mearness of raw materials, and (8) unusual recreational facilities. These advantages consist both of desirable natural factors plus human factors.

The climatic cycle of Sedalia is a complete cycle, having very distinct seasons which are favorable in the productivity or health of man. The physical setting is neither monotonous nor severe, consisting of a rolling prairie with a few scattered hill-lands. Both are favorable to man's activity and progress.

Sedalia's history is a story of the development of railroads and highways which concentrated here; the city's location became highly advantageous to industry. It is because of this constant industrial growth, along with continual improvement of transportation, that Sedalia has now grown to be much more than an agriculture shopping center. Such evolution of the city tends to show that new industries will follow the previous pattern, locating here while the old industries will tend to expand.

Authoritative information concerning the surrounding area in reference to climate, physiography, history and soils was utilized, but the further study of the city and functions, its various facilities, industries and possibilities was accomplished through field surveys, conferences and correspondence with prominent individuals in their respective fields. A synthesis, derived from available information, should lead to satisfactory prognostication of the future of Sedalia.

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